

BORN GLOBAL IN ACTION:

THE POTENTIAL INTERNATIONALIZATION OF A MEDICAL
TECHNOLOGY START-UP TO A COMPLEX BUSINESS ENVIRONMENT
WITHIN A HIGHLY REGULATIVE INDUSTRY

Master's Thesis
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Strategy
Fall 2020

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Title of thesis Born Global in Action: The Potential Internationalization of a Medical Technology Start-up to a Complex Business Environment within a Highly Regulative Industry

Degree Master of Science in Economics and Business Administration

Degree programme Strategy

Thesis advisor(s) Hannu Seristö

Year of approval 2020

Number of pages 127

Language English

Abstract

This thesis focuses on exploratory research via a case company study to contribute to the literature of international entrepreneurship. The particular focus was on a potential market entry strategy to the Indian market for a medical technology start-up, through the case example of LAKKA Health Oy. The main research question of this thesis is to understand the plausibility of the Indian market for a medical technology start-up with their hypoglycemia detection wearable device. In particular, the aim of the research is to determine the potential sales and marketing channel strategies that the start-up can use in India to gain optimal visibility and sales potential. Furthermore, to determine the difference in impact of entering the market through the medical device route versus the wellness product route on the ability to gain visibility and sales in the Indian market.

The literature review details the literature on born global internationalization coined under the term international entrepreneurship (Oviatt and McDougall, 1994). The section also includes discussion in regard to specific sales and marketing channel strategies tailored for start-ups internationalizing. The chapter concludes with an illustrative conceptual framework of the literature in regard to a potential market entry strategy for a medical technology start-up entering the Indian market which is later linked to the empirical findings in the discussion section.

The empirical research was done using the qualitative research method. In particular, the research concentrates on an exploratory, single intensive case study. The case company in question is LAKKA Health Oy, a Finnish start-up currently developing a hypoglycemia detection wearable device with interest in quick internationalization to several target markets, one being India, once the product is ready. Semi-structured interviews were conducted with internal employees of LAKKA as well as experts in the areas of India, the Health technologies industry and lastly successful internationalizing SMEs.

The findings underline several key themes for a MedTech start-up to consider when internationalizing to India. The main themes include the market complexity of India, benefits of an Internet-based sales channel strategy and niche target marketing, and lastly the homogeneity of digital consumer behavior.

The discussion ties together the findings from both the literature and empirical research, with emphasis on how the academic conceptual framework can be applied to MedTech start-ups wanting to enter the India market. The discussion is divided into sub-sections to answer the main research question and sub-questions. In particular, the discussion concludes the best fitting approach to enter the Indian market. Insights and suggestions into what sales and market channel strategies aid in the ability to gain visibility and sales in India are also provided. The thesis concludes with managerial implications for the case company to consider and future research suggestions.

Keywords born globals, international entrepreneurship, medical technology start-ups

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. Background and Research Problem.....	3
1.2. Research Objectives and Questions.....	5
1.3. Thesis Structure.....	6
2. LITERATURE REVIEW	8
2.1. Defining Start-ups.....	8
2.2. Strategic Process and Planning of Start-ups.....	9
2.3. Components of the Medical Device Industry.....	12
2.3.1. Digitalized Medical Devices Industry: eHealth.....	12
2.3.2. Start-ups in the eHealth Industry	13
2.4. Components of the Wellness Wearable Industry	16
2.5. Traditional Market Selection Analysis	18
2.6. Traditional Market Entry Strategies	19
2.7. International Entrepreneurship	21
2.7.1. Drivers of Internationalization for Born Global Start-ups	23
2.7.2. Case Research on International Entrepreneurship	24
2.7.3. Sales Channel Strategies of Born Global Start-ups	27
2.7.4. Creation of Brand Awareness for Born Global Start-ups.....	31
2.8. Conceptual Framework to Case of Medical Technology Start-up	35
3. RESEARCH DESIGN AND METHODOLOGY	40
3.1. Research Approach.....	40
3.1.1. Exploratory, Single Intensive Case Study	42
3.2. Research Context.....	43
3.2.1. Introduction of the Case Study	43
3.3. Qualitative Data Collection.....	46
3.3.1. Semi-Structured Interviews	47
3.3.2. Interview Process	48
3.3.3. Secondary Data Sources	51
3.4. Data Analysis	52
3.5. Limitations of Research Method and Ethical Considerations.....	53
4. FINDINGS	55
4.1. Internal Understanding of LAKKA Health Oy	56

4.2. Case of India.....	58
4.3. To Market as Medical Device versus Wellness Product	66
4.4. Past and Present Sales Channel Strategies for SMEs	69
4.5. Gaining Visibility Through Market Entry and Marketing Strategies.....	74
4.6. Secondary Research on Potential Competitors	82
4.7. Summary of Findings	84
5. DISCUSSION.....	85
5.1. LAKKA Health Oy Internal Capabilities	85
5.2. Market Entry Plausibility of the Indian Market	87
5.3. To Enter as Wellness Product versus Medical Device	89
5.4. Sales and Marketing Channel Strategies for Visibility Maximization	92
5.5. Potential Implications for International Entrepreneurship.....	97
6. CONCLUSIONS	99
6.1. Summary of Main Findings	99
6.2. Implications for Management	106
6.3. Suggestions for Future Research	108
REFERENCES	110
APPENDICES.....	122

LIST OF TABLES

Table 1: Interview Data.....	51
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LIST FIGURES

Figure 1: The Business Model Canvas (Source: Osterwalder & Pigneur, 2010).....	11
Figure 2: IE Framework (Source: Oviatt and McDougall, 1994).....	22
Figure 3: Drivers of High-Tech Start-ups Internationalization (Source: Cahen, 2019)	24
Figure 4: Internet Sales Channel Strategies (Source: Gabrielsson & Gabrielsson, 2011)...29	
Figure 5: Thesis Conceptual Framework (Source: Gabrielsson & Gabrielsson, 2011).....	36
Figure 6: PESTEL Framework of India (Source: Sammut-Bonnici & Galea, 2014).....	37
Figure 7: MedTech Start-up Market Entry Strategy to India Framework	100

1. INTRODUCTION

Digitalization has completely transformed the healthcare system, allowing new ventures focused on digital innovations the opportunity of global success (Saarela, Simunaniemi, Muhos, & Leviäkangas, 2018). The digital transformation has resulted in the emerging field of eHealth, or health services and information connected via the Internet and related technologies (Eysesnbach, 2001). Current healthcare systems are facing challenges in how to remain sustainable as the increasing prevalence of chronic diseases has increased the demand for healthcare services (Van Limburg et al., 2011). Accordingly, digitalization and specifically the resulting eHealth have high market potential to provide the opportunity to improve the healthcare sustainability (Chowdhury, 2012).

One of the eHealth genres experiencing exponential growth in recent years is the wearable technology market. This is due to new customer preferences, and growing interest in connected devices under the internet of things (IOT) ecosystem (Markets and Markets, 2017). In 2015 the market was valued at 15.74 billion USD in 2015 however it is expected to reach 51.60 billion USD in 2022 with a compounded growth rate of roughly 15.5% annually (ibid). Currently, consumers are demanding more specific health and medical monitoring in the form of these innovative, user-friendly, and non-invasive wearable devices (Kraudel, 2018). And several new global medical device start-ups have been formed revolutionizing the market and creating innovative personal healthcare gadgets to meet the new consumer demands (Lineaweaver, 2018).

These start-ups being created have recognized the business opportunities in this new eHealth market and are able to focus on utilizing their innovative and revolutionary technology capabilities to create wearable technology to meet the new customer demands (Lee, Park, & Lee, 2019). Start-ups are unique to traditional companies, as they are known to have limited resources and financial capabilities (Kraus et al., 2017; Zhang & Li, 2010). Therefore, roughly 90 percent of start-ups fail to make it to market (Lee, Park, & Lee, 2019). However, start-ups also differ in terms of their internationalization patterns. These start-ups focus their attention on quick and multiple market entries to several different international markets. Accordingly, these start-ups are usually identified as born globals (Gabrielsson, 2011).

Competition within the wearables start-up market is stiff, particularly in the blood glucose measurement monitoring market. Several new ventures have pursued non-invasive glucose measurement wearables for several decades with no feasible solutions (Tronstad et al., 2019). Hypoglycemia, the relative excess of insulin in one's blood, is one of the most serious complications in type-1 diabetes and usually results in low blood glucose levels (Tomky, 2018; Tronstad et al., 2019). Hypoglycemia is usually difficult to detect, as in the beginning there are very minimal symptoms, however, can lead to medical emergency episodes and in worst-case scenario death (Tomky, 2018). The diagnose of this chronic disease leads to a life-long surge in sickness and potential of mortality for the patient (Patterson et al., 2012). Research has shown that new cases of type 1 diabetes are increasing roughly 3.4% annually in Europe alone, particularly with a steady increase of diagnosis in children. This means in 20 years the type 1 diabetes population will double in size (ibid). Accordingly, the interest in finding a best practice solution to improve quality of life and reduce long-term complications is becoming increasingly more important.

One particular country that is experiencing a rapid increase in diabetic patients, being likened to an epidemic, is India with roughly 65 million of the population currently suffering from the disease (IMARC Group, 2019). The Indian diabetes market was valued at 1,954 million USD in 2018 and expected to grow at a compounded annual growth rate of 16.7% till 2024 (ibid). The current statistics are troublesome for the country as the population is underserved with limited awareness and treatment options, however, has also resulted in an increase in healthcare spending. This means a potentially profitable opportunity for global diabetic drug and diagnostic companies interested in expansion to India. The growing desires for non-invasive forms of hypoglycemia detection as well as huge increases in cases annually, particularly in India, make this an interesting and significant field of study. Hence, the aim of this thesis is to study and determine potential market entry strategy options to India for LAKKA Health Oy with their hypoglycemia detection wearable bandage.

1.1. Background and Research Problem

Several start-ups developing medical wearable devices particularly, hypoglycemia detection measurement devices, have emerged in order to find the best practice to care for the disease, particularly focusing on non-invasive solutions. However, no generalized and viable product has been developed yet. LAKKA Health Oy, which will be referred to as LAKKA from now on in the thesis, was founded in 2016. LAKKA is currently developing a non-invasive sensing method which enables the detection of hypoglycemia from the volatile organic compounds with contact via the skin, similar to hypo-dogs. The start-up is specifically interested in directly entering several markets, when the device is ready for retail, as it sees that entering several markets simultaneously will increase the potential for market share and brand creation.

Particularly, the company wants to enter the Nordic markets and other EU member countries, as well as India in their first round of internationalization. The company is currently receiving external market analysis research to understand the potential in the EU markets. However, India is completely unknown to them but is seen as one with great potential due to the huge market of diabetics in the country. Therefore, this thesis will specifically focus on LAKKA and their potential market entry into India, to determine possible market entry strategies and ways of implementation to the chosen market. Furthermore, the purpose of this research is to analyze the usage of sales and marketing channel tools to help the start-up establish brand visibility and gain an optimal level of sales in the Indian market.

The current desires for non-invasive detection methods and the continuous increase of diabetes cases, particularly in children, have influenced the desire for the case company to launch their product to several markets with a relatively speedy internationalization. As a result, the start-up is currently considering the way in which to label and market the product. Specifically, if the product would be under the consumer wellness product umbrella the time to market would be shortened as it would allow them to self-declare the CE marked product. This approach to entry entails patient tests but eliminates the need for an external organization to audit the safety of their product, which include highly regulated and rigorous requirements. However, if the start-up went with the clinically proven certified medical device approach to market entry, they could form relationships and partnerships with doctors

and hospitals districts; as a result, there is automatic customers and trust for the product. Therefore, this thesis will also analyze the benefits of these different approaches, to determine the most feasible and marketable approach in the target market.

LAKKA sees their product as revolutionary and completely missing in the current care of diabetes. As such, they understand that larger medical companies are currently developing their own detection methods and so in order to achieve the highest market share and create a brand for themselves they must be proactive in launching their product. The company also sees the need to enter several markets in close time proximity to reduce the risk of foreignness and maximize sales potential. The company is utilizing the cost leadership strategy as the price of their device is relatively lower compared to their competitors. However, they do not want people to perceive the quality as poor due to the lower price. Lastly, India is known as a complex business market, which requires a thorough analysis and understanding of the potential challenges and opportunities of the market.

The research of start-ups and their internationalization has gained popularity in recent years and is fairly novel in regard to product-based and digital start-ups entering a new market (Cahen, 2019). However, in the mid- 1990's the study of start-ups internationalizing was coined with the term international entrepreneurship (IE) after the pioneer study by Oviatt and McDougall (1994). The term, specifically for start-ups, was created because the findings of their study revealed that the internationalization of start-ups was inexplicable through the traditional market entry theories (ibid). However, the research, notably of digital start-ups, has not resulted in concrete theoretical implications that can be generalized to these types of start-ups (Cahen, 2019). Consequently, there is no definite conclusions in terms of how a digital start-up can implement successful market entry strategies (Zander, McDougall-Coven, & Rose, 2015).

Therefore, this thesis will focus on contributing to the international entrepreneurship theory particularly on the internationalization of medical technology (MedTech) start-ups. The empirical research will be conducted under the context of the case company LAKKA Health Oy and their innovative hypoglycemia detection wearable device. The main aim is to determine potential market entry strategies for MedTech start-ups into the Indian market, through empirical research of LAKKA's internal management as well as influential external

opinions. These will be further tied to and potentially develop the academic literature on international entrepreneurship.

1.2. Research Objectives and Questions

In this study, the main aim is to provide a new perspective for the concept of international entrepreneurship (IE). The research focuses on a case study of LAKKA Health Oy. The empirical research seeks to determine a potential market entry strategy to enter India, directly after introduction to the market, with a hypoglycemia detection device. The research will seek to also provide insight in how a MedTech start-up can utilize a single product launch, with their current limited resources, to gain optimal visibility and sales potential for their wearable device. Additionally, the thesis will also analyze and determine which route, medical device, or wellness product, will positively increase a MedTech start-up's ability to achieve visibility and market share in the Indian market.

The context, particularly the technology being introduced into a highly regulated industry and the complex business environment of India, renders the research interesting and worthy of investigation. Practical knowledge in how to implement the strategies to potentially enter the market will also be given to the case company. Overall, the main objective of this study is to utilize an exploratory approach to analyze how the current research on IE can be applied to a case start-up example and to form suggestions of what a possible market entry strategy for MedTech start-ups could be to the Indian market (Yin, 2017). Therefore, the qualitative research will focus on the following main research question:

What is a potential market entry strategy to the Indian market for a medical technology start-up with the launch of their hypoglycemia detection wearable device, in terms of sales and marketing channels strategies, to gain optimal visibility and sales potential?

It is important to note that the meaning of the marketing channel strategies expression utilized in the above question, refers to the specific marketing channel strategies applied for the particular target market entry. Moreover, the emphasis is in how these strategies can

increase visibility and sales potential within the target market. Hence, it is different from the strategies used in the broader marketing strategies of the start-up. Consequently, the purpose of this thesis is not to determine the extensive marketing strategies but rather discuss and analyze potential marketing channel strategies that medical technology start-ups can use with their market entry into the Indian market.

The following sub-questions support the main research question, to guide and extend the research. The questions detail the market entry approach that a MedTech start-up could take in the Indian market as well as the how a start-up can utilize the cost leadership strategy with a single product and the current resources to maximize brand awareness and market share.

- 1. How does a medical technology start-up go-to-market strategy choice between a certified medical device versus a wellness product impact their ability to gain visibility and potentially disrupt the Indian market?*
- 2. How can a medical technology start-up utilize the cost leadership strategy and maximize brand awareness and market share within the boundaries of the single product internationalization strategy and limited resources?*
- 3. What are the potential implications of this cost leadership strategy as practice for the international entrepreneurship (IE) theory particularly with the context of a highly regulated industry and business environment?*

1.3. Thesis Structure

This thesis is divided into seven separate chapters. The current introductory section details the background of the study and reasoning for the research on the topic. In addition, this chapter relays the research objectives and questions, that represent the main aim for this thesis research. Chapter two will dive deeper into the current research on the umbrella term international entrepreneurship, particularly focusing on born global start-up internationalization. Furthermore, the literature review will focus on research detailing start-ups potential market entry sales and marketing channel choices to increase brand visibility

and awareness. The literature review chapter will conclude with a conceptual framework visualizing the theoretical literature in regard to a market entry strategy for a MedTech start-up to the Indian market.

Chapter three argues the research design and methodology chosen for the research. This chapter, specifically, acknowledges how the empirical study was chosen and what qualitative methods were applied. The reasoning behind the chosen data collection methods and the data analysis procedure will also be recognized and discussed. Lastly, this chapter ends with the limitations of the chosen case study research method as well as the ethical considerations.

The subsequent chapter discusses the secondary research findings and the qualitative findings of the empirical research. The empirical findings are explicitly divided into themes resulting from the analysis of the conducted semi-structured interviews. The discussions section will further analyze and connect the empirical findings to the academic literature. The final chapter of this thesis includes the conclusions and a summary of the research, with specific practical implications for LAKKA, as well as limitations and future research suggestions.

2. LITERATURE REVIEW

This literature review provides a basic introduction to the current research on start-ups internationalizing, coined as international entrepreneurship (IE). Firstly, the concept of start-ups will be introduced with specific mention of new ventures in the digitalized medical industry defined as eHealth and the wearable wellness industry. The literature review will follow with comparison analysis of the market entry strategies choices taken by new ventures and the traditional ones taken by large corporations, with specific reference to the theoretical concept IE. Furthermore, in relation to the current case company, the literature review will explore the sales channel strategies for born global start-ups as well as the potential for brand awareness creation with rapid internationalization. Lastly, a theoretical framework tailored to the single product cost-leadership internationalization strategy of a MedTech start-up to the Indian market will be illustrated to showcase what the disruptive market entry strategy, in terms of sales and marketing channels, could be to achieve optimal visibility and sales potential.

2.1. Defining Start-ups

Start-ups have been defined as companies that emerge with the goal of forging new markets and business opportunities in uncertain environments, while combining new ideas with innovative, cutting-edge technology capabilities (Lee, Park, & Lee, 2019). Luger and Koo (2005) simply define start-ups under three criteria: new, active, and independent. Start-ups or new ventures are usually identifiable by their limited resources, particularly regarding their lack of financial capabilities (Kraus et al., 2017; Zhang & Li, 2010). In the medical industry, startups are started from entrepreneurial instinct, usually as a result of the entrepreneur's higher education and as a reactive response to issues confronted in the real world. Unlike the traditional process of start-up development, new ventures in the medical technology industry are not reliant on past experiences of the entrepreneur in the specific business (Livi & Jeannerat, 2015).

New ventures and established companies have several fundamental differences that are seen as opposing strengths. Weiblen and Chesbrough (2015) comment that while a corporation

has access to resources, power, and proven processes that allow them to operate efficiently, a start-up has innovative ideas, high risk tolerance, organizational agility, and aim for rapid growth. While Saarela et al. (2018) note that new entrants are more likely to accept greater risks than larger firms. Zhang and Li (2010) note that the lack of external contacts increases the difficulty of exploring new regions, therefore their risk tolerance may not directly allow for rapid growth. Furthermore, start-ups are companies that have not been embedded into an existing supply chain network (Oukes & Raesfeld von, 2016).

Research has found that roughly 90 percent of start-ups fail to even enter a market. Hence, only new ventures that create core strategies and are both proactive and reactive with the demands of the rapidly changing market conditions can find success in entering a market (Lee, Park, & Lee, 2019). Weiblen and Chesbrough (2015) add that new ventures must also create innovation that disrupt the norm to truly find success in the global economy. Challenges in regard to knowledge-based industries such as the biotechnology industry have also been analyzed and the research has found that the limited resources combined with the complex and rapidly changing nature of the industry makes individual success implausible as the firm does not possess all knowledge capabilities themselves (Rank, 2014). Oukes and Raesfeld von (2016) add that start-ups and the value of their resources are dependent on their relations with surrounding organizations' knowledge and resources.

2.2. Strategic Process and Planning of Start-ups

Traditional strategic management literature also differs in how the strategic process looks for a start-up. In regard to the success of new ventures, more emphasis needs to be placed on the business model design (Onetti et al., 2012). Traditionally, larger companies have utilized the business model as a way to capture and create value and as a preparation tool for internationalization (Osterwalder & Pigneur, 2010; Zott, Amit, & Massa, 2011; Meyer, 2017). Although, a communal definition for business model has not been formed, it has been traditionally defined as a way of analysis and a holistic tactic to develop the internal and external activities of a company (Carvalho, Galina, & Sánchez-Hernández, 2019). It has also been regarded to be a strategy enabler for the company. This means that having a business model in place aids in the implementation of the overall firm's strategy (Onetti et al., 2012).

However, researchers have noted that strategic success is different for new ventures. Particularly, start-ups must shift their strategic thinking, way in which they approach management, and their overall business operations (Carvalho, Galina, & Sánchez-Hernández, 2019). This is because new ventures, specifically in a technology focused industry, also have strategic processes that are incomparable to those discussed in traditional strategic management, as now geography plays a crucial role in discussions about new venture management (Onetti et al., 2012). Accordingly, in 2010, Osterwalder and Pigneur, introduced the business model canvas (BMC) to visually represent a new venture's strategy, specifically detailing the money-making capabilities of the start-up. The BMC can be classified as a modernized take of the business model with its emphasis on agility, focus on end customer demands, and reference to the impact of geography (Shahand, van Duffelen, & Olabarriaga, 2015).

The business model canvas, as seen below in Figure 1, consists of nine building blocks designated for start-ups including: value proposition, infrastructure, customers, and the finances of the business (Osterwalder & Pigneur, 2010). The BMC framework consists of four main categories including: the value, infrastructure of relationship between firm and supply chain partners, what the venture is providing, and the significant financial data (Carvalho, Galina, & Sánchez-Hernández, 2019). Researchers have recognized the value proposition as the key aspect of the diagram as it confirms the market gap the company is filling and potentially its competitive advantage (Shahand, van Duffelen, & Olabarriaga, 2015; Carvalho, Galina, & Sánchez-Hernández, 2019.) On the other hand, Osterwalder and Pigneur (2010) acknowledged customers to be the core of any business model and thus see the importance of defining the customer segment to understand the specific needs of who they are targeting. Furthermore, the business model canvas highlights the main partners of the start-up, their key activities and key resources.

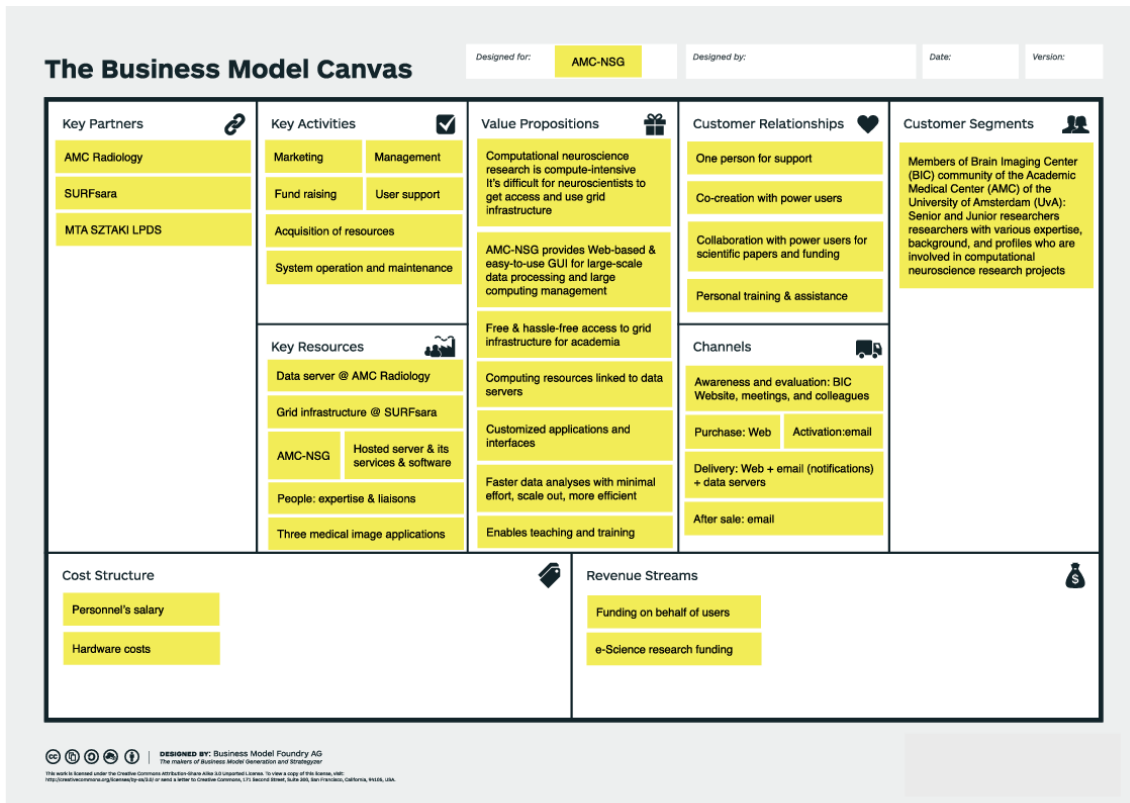


Figure 1: The Business Model Canvas (Source: Osterwalder & Pigneur, 2010)

The BMC is an essential tool for start-ups as it provides them with an aligned focus and approach, increases speed and efficiency needed to reach the market, and ensures agility (Carvalho, Galina, & Sánchez-Hernández, 2019). Specifically, the researchers interviewed start-up managers and found that the managers contributed the building block components of the BMC to allow the start-up the ability to understand how they relate each other and form a consensus for the strategic elements and overall path of the venture (ibid). Furthermore, they noted that the tool improved their decision-making capabilities, aided in understanding competitors and comparison to them, and improved innovation and usage of experiential learning. Osterwalder and Pigneur (2010) acknowledge that the establishment of the business model building blocks allows the company to create a strategic positioning in terms of global value creation.

2.3. Components of the Medical Device Industry

As the previous section broadly defined start-ups and their strategic choices through use of the BMC tool, it is important to narrow the research to the specific industry of interest. The medical or healthcare industry can be considered an umbrella term with several sectors classified under the industry. The medical device sector plays a crucial multi-purpose role in the overall healthcare industry (Verma, 2018). In EU regulation terms, specifically the Medical Devices Directive 93/42/EEC, a medical device is defined as “any instrument, apparatus, appliance, software, material or other article, whether used alone or in combination, including the software intended by its manufacturer to be used specifically for diagnostic and/or therapeutic purposes and necessary for its proper application,” (Council of the European Union, 1993, p.5). These devices are utilized to screen and diagnose patients for a variety of chronic diseases, monitor vital health indicators to prevent potential diseases, and they allow patients a certain aspect of normalcy in their lives (Dang & Sharma, 2019).

The global medical device manufacturing industry is composed of roughly 27,000 companies including several small start-up ventures focused on innovative technologies for niche market segments (Beaulieu & Lehoux, 2018). The four main medical device segments broadly defined include consumables and implants, instruments and appliances, and devices for diagnostic imaging and patient aids (Verma, 2018). More specifically, they can be categorized under the main product types including non-durable products, diagnostic devices, prostheses, orthopedic and dental products (Beaulieu & Lehoux, 2018). The medical device segment is considered a versatile sector because it includes simple devices that are close to the patient as well as highly advanced and complicated surgical implants that are only utilized by the designated physicians (Dang & Sharma, 2019).

2.3.1. Digitalized Medical Devices Industry: eHealth

The introduction of the Internet has led to several industry revolutions. One such area that is currently experiencing the effects of digitalization is the medical device industry. This current phenomenon has been recognized as eHealth. In 2001, Eysenbach defined eHealth as an evolving field of connected health services, thus medical devices and information delivered through the Internet and other innovative technologies. Researchers see eHealth as

a solution for the current economic implications faced by the healthcare industry, as the continuously increasing cost of healthcare is no longer sustainable, as both the patient profile and increasing demands for more patient-centric care are pressurizing the outdated systems (Meier, Fitzgerald, & Smith, 2013).

eHealth allows companies to be more consumer-focused placing more emphasis on personalized medical devices tailored specifically to the individual resulting in improved patient outcomes (Meier, Fitzgerald, & Smith, 2013). Furthermore, the eHealth intelligent technologies increase the capabilities of remote monitoring, thus allowing chronically ill patients to have a greater degree of autonomy (Geissbühler, 2012). Some researchers view the potential for eHealth to restructure the entire health care business model, with emphasis on improving quality and personalization of care to establish a more effective cost to value ratio for medical services (Meier, Fitzgerald, & Smith, 2013). Geissbühler (2012) acknowledges that the complexity of healthcare systems leads to their fragmentation in terms of efficiency and quality and thus eHealth can be utilized to facilitate the relations between the several stakeholders of the medical industry. Specifically, improving the flow of medical information and improving the care processes allowing for better approaches to access and produce the care for patients.

2.3.2. Start-ups in the eHealth Industry

As previously mentioned, digitalization has completely transformed the delivery of health services, particularly allowing start-ups specializing in digital innovations the chance for global business opportunities (Muhos, Saarela, Foit, & Rasochova, 2019). These new ventures challenge the traditional medical industry with their sustainable and groundbreaking innovations particularly with their proactive product development and creative utilization of resources within their network. The research has mainly focused on the determinants of a successful medical device start-up. Specifically, research has found that technical skills, marketability, capacity of entrepreneurship, and funding are prioritized in successful medical device start-ups (Lee, Park, & Lee, 2019).

In their study on digital health service start-ups based in California, the researchers found that network management is a critical aspect for start-ups. Particularly participation within

the health and life science ecosystems, provided the start-ups access to useful networks such as accelerator programs and investors. Furthermore, strong external networks including funding participates aid in a new venture's survival and future steady growth (Muhos et al., 2019; Rank, 2014). Saarela et al. (2018), also found similar results, with their case study research on Finnish eHealth service firms, in that communication and partnerships with public funding sources can be crucial for success in business.

New ventures can also leverage their relationships with service intermediaries, including supporting services in areas of accounting and finance, to extend their external network capacity as well as aid them in with finding external innovation (Zhang & Li, 2010). Livi and Jeannerat (2015) further noted that because MedTech start-ups are faced with a strictly regulated industry and high production costs they contradict the recognized view that start-ups can rely on local loans from banks. Instead, they must gain interest and funding from global recognized organizations to be profitable. This is done through a variety of funding via network-based strategies. This includes subsidies from the government, local capital from personal network, and support from venture capitalists. However, in a knowledge-based industry there is no motivation to create relationships amongst firms and thus the competitive nature of the industry is stronger than the possible benefits of working together (Rank, 2014). And therefore, one determinant of a successful start-up is the access and usage of partnership networks with focus on collaboration and obtaining new resources, unavailable prior to these network connections.

However, researchers have also discovered that although one of the main issues of eHealth new ventures was the ability to commercialize, public support systems of eHealth new ventures were more focused on product development. In the specific case of Finnish eHealth start-up, many of the interviewees noted that they lacked essential business skills while having significant expertise on the technical side (Saarela et al., 2018). This dilemma was also found in the study of Swish start-ups by Livi and Jeannerat (2015), who observed that although access to technical skills was properly provided to by local research institute funders, many of the new ventures found it difficult to gain funding for their research and development needs.

Furthermore, research has found that although these start-ups deliver innovative solutions, access to the healthcare industry is difficult particularly because of the resistance to change in the public sector. Many start-ups do not have access to public health systems because these healthcare systems are not willing to alter their familiar practices and processes (Saarela et al., 2018). As a result, start-ups need a scientific reasoning for all claims in regard to their service-related products in the health sector and these necessary certification requirements take several years to secure as they require rigorous testing to minimize risk in this regulation-centric and safety-driven industry. From this it can be determined that the acceptance and market entry of eHealth start-ups can be considered a slow process that can take several years, and these start-ups have a small window of opportunity to avoid failure. Consequently, the initial starting up phase is the most significant time for digital health service ventures (Muhos et al., 2019). In actuality, this means the start-up must specialize their skills and scale their experimentation and case trials to a larger scale in rapid succession to develop and deliver in the digital health service market (ibid).

In particular, the researchers found that at this stage, the decision-makers and thus management team of these start-ups have several priorities one such includes convincing the significant opinion leaders to be potential interested customers, specifically targeting them through initial marketing (Muhos et al., 2019). However, during this period, start-ups have noted the difficulties of commercializing (Saarela et al., 2018). In their research on case companies, Saarela et al. (2018) found that the initial commercial gain must be done swiftly as the eHealth business is global and imitators are highly plausible. The interviewed managers of new ventures specifically noted that larger companies within the industry have formed strong relations with health sector organizations allowing them to do test runs for free. This in turn increases the barriers to enter the market for the start-ups (ibid).

Livi and Jeannerat (2015) acknowledge that due to the difficulties in commercialization and from the support of the opinion leaders, start-ups utilize their innovative products as a marketing tool to sell themselves to larger companies. The profits gained are then used to set up new projects and ventures. Therefore, contrary to the traditional idea that start-ups are only focused on creating medical devices to sell in the market, they conclude that eHealth start-ups aim to improve their overall intrinsic value or worth to investors. Therefore, they view themselves as an entrepreneurial project for MNEs to purchase (ibid). Nonetheless, the

results of the research highlighted that the growth and characteristics of an eHealth start-up is distinctive and therefore success strategies and challenges cannot necessarily be directly generalized to a larger scale. Rather they are possible suggestions that can be utilized for the individual start-up in question (Muhos et al., 2019).

2.4. Components of the Wellness Wearable Industry

Digitalization has transformed the medical device industry as mentioned above. However, this digital transformation has also introduced a new type of eHealth technology known as wearable devices (Guk et al., 2019). Wearable devices focus on personalized and real-time tracking of several different chronic and acute diseases (ibid). Yet, currently, there is no official legal definition for wearable devices in the EU and if the device is classified to be used for general wellness purposes and not specifically as a monitoring device for a specific disease, the device is considered out of scope of the legal definition for a medical device (Covington Digital Health, 2019). This has enabled the manufacturer to avoid certified medical device acquisition and instead self-certify their product to be sold on the market for a particular target disease. This means, however, that legally the product cannot be classified as a medical device for a specific medical purpose, rather as a wellness consumer product (ibid). As a result, consumer wearables for clinical usage is fairly limited and are mainly used for health and wellness purposes (Piwek, Ellis, Andrews, & Joinson, 2016).

Wearable devices under self-declaration have issues with their overall reliability. These devices are marketed to improve health and fitness performance, but most manufacturers do not provide empirical proof for these claims (Piwek et al., 2016). Research between a variety of wearables tracking physical activity resulted with a significant range of variation in accuracy amounting to error margins up to 25 percent (Lee, Kim, & Welk, 2014). Therefore, this lack of trust is a serious issue in the wearables industry that needs to be resolved if a manufacturer wants to go beyond the wellness industry to apply its product for a medical purpose (Piwek et al., 2016).

On the other hand, the overall global wellness and fitness market is experiencing healthy growth and several consumers are increasingly purchasing these non-medical products. In

their report discussing new consumer perspectives and entrants in the health industry, PwC concluded the wellness market to be the most accommodating entry option for new ventures as there are several ways to introduce innovative products without needing to involve the government or compete with traditional providers (PwC, 2015). In their survey they also acknowledged consumers' increased desire for the wellness benefits that result from wearing wearable devices, which indicates possibility for exploitation of the market (ibid).

Based on a variety of market research reports, they also estimate the industry to reach 1.49 trillion USD, particularly acknowledging consumers in markets like India are increasingly becoming more interested in the wellness industry. In India the industry reached 11.4 billion USD annually in 2012 with growth of over 18 percent compared to the previous year. These new ventures in the wellness industry are also responsible for the education and overall increase of awareness in health and fitness in the country (PwC, 2013). The wellness industry is being likened to a good starting point for new start-ups to experiment as new entrants, however an industry in which it is difficult to maintain sustainable competitive business model. It was also noted that the most successful start-ups are diversifying their offering to increase profit margins, and it was remarked that the most important factor for success is the right price (PwC, 2015).

Overall, the academic literature on the wellness wearables industry is limited due its novelty, with greater emphasis on how wearables can be translated to be used for medical purposes as medically certified devices. However, consulting companies have concluded the industry as one with high potential, particularly the wearables market. This is because of the new consumer perspectives and limited barriers of entry for start-ups wanting to introduce innovative products. Limitations of the market were also acknowledged which included difficulties of attaining sustainable business models and significant error margins decreasing the reliability of the wellness products. The above sections introduced two potential internal approaches of market entry for a wearable device and the following sections will detail more generally the traditional market entry selection and strategies and later discuss ones more specific for international entrepreneurship or born global internationalization.

2.5. Traditional Market Selection Analysis

Once the go-to-market strategy is internally decided, in terms of how to market the product, the next step is to choose the target market. The market selection process is essential for a company during the internationalization process. Globalization and the current digital transformation have increased the significance of international competitiveness and the need to have dynamic procedures. These two factors ensure success in the continuously changing and unstable business environments. In other words, when expanding abroad, companies need to consider the environment in which they want to operate in, to understand how it impacts their potential business activities (Yüksel, 2012). The PESTEL framework and analysis has been utilized by several traditional internationalizing companies to obtain basic information about their potential target company (Huang, Ruangkanjanases, & Chen, 2014).

PESTEL is an acronym, representing a ‘Political, Economic, Social, Technological, Legal, and Environmental’ analysis on a country. The framework emphasizes macro-environmental elements that describes the business environment of a country and is particularly useful when doing preliminary market research (Huang, Ruangkanjanases, & Chen, 2014; Sammut-Bonnici & Galea, 2014; Yüksel, 2012). When in the process of market expansion, market selection is an essential and time-consuming step as it involves thorough and holistic analysis of potential markets to see which one is the best fit for the company. Therefore, analysis through the PESTEL framework provides useful information in regard to the target country’s market growth potentiality, business environment, and potential operational directions (Huang, Ruangkanjanases, & Chen, 2014).

The political factors, of the PESTEL model, acknowledge the influence of the target company’s government, explicitly the degree to which the governmental officials influence the commercial environment. Issues such as taxation, labor, environmental legislation, and stability of the government are taken into consideration in this section of the model. Economic factors relate to the overall attractiveness of the target company. The emphasis of this analysis is to understand the impact of the country’s GDP, consumer purchasing power, and the overall state of the economy on the potential for the company to be successful in the market. The consumer behavior, preferences, lifestyle, and broad demographics make up the social factors of the PESTEL framework. The technological characteristics relate to the

innovativeness within the country or particular industry as well as highlighting whether the technological infrastructure is attractive for the company. (Sammut-Bonnici & Galea, 2014)

The fifth letter in the PESTEL model refers to the environmental factors that encompass the ecological infrastructure, public health and green issues. Lastly, the legal considerations focus on the competition laws, consumer rights, and overall judicial system (Yüksel, 2012). The PESTEL model is not a perfect tool for strategic management as it has certain drawbacks including the lack of quantitative data to measure the different factors of the model, as such the analysis is not objective. Furthermore, these factors are individually analyzed while in the real world many of these factors affect each other and thus the relations between the dimensions should be taken into consideration (ibid). Nonetheless, the framework and resulting analysis provides crucial information that the company in question can utilize when determining which market to enter (Huang, Ruangkanjanases, & Chen, 2014). Additionally, market selection also plays a key role in determining how, thus which entry mode should be utilized, to enter a market.

2.6. Traditional Market Entry Strategies

After the initial market research and selection, the firm has several entry mode choices that can be categorized based on the extent of resource commitment and the risk involved with the entry strategy choice (Agndal & Chetty, 2007). Research on market entry strategies for companies has been extensive and several new theories and strategies have resulted from case research. However, much of the research has focused on the internationalization of traditional multinational companies and thus most of the research about the choices reflect decisions of these multinational enterprises (MNEs) rather than born globals.

The use of each individual mode provides different effects into the amount of control the company can have in the international market, as well as the resources and risks it must internalize in order to successfully enter the foreign market (Hollensen, Boyd, & Ulrich, 2011). Exporting is deemed as the market entry choice with the least amount of risk because it involves little initial investment (Agndal & Chetty, 2007). Exporting involves the transfer of the product or service to the selected market either directly or indirectly (Driscoll &

Paliwoda, 1997). Contractual entry mode choices include a variety of agreements such as franchising, non-equity joint ventures, and other technical knowledge sharing arrangements. These are chosen when the firm has a competitive advantage but due to limitations in their resources are unable to reap the benefits from it in the foreign market. Rather, they can transfer the knowledge to the partner of their choice (ibid). The last mode of market entry strategies are the investment modes. This strategy involves a certain form of ownership and control of the firm in the chosen target market. The investments in this category may be made by acquisition, mergers, or greenfield investment. Greenfield investments, particularly relate to the company starting a new facility within the target market, and this investment can be wholly owned, or they can establish a joint venture with a local partner in order to reduce costs and time resources (ibid).

Several situational determinants and external factors influence the mode of entry decision made by the managers of the company. Specifically, a company may have firm-specific advantages or location benefits. Firm-specific advantages relate to tangible and intangible assets that give the company a competitive advantage compared to other companies. In regard to the expansion of a foreign market these advantages outweigh the risk of foreignness. Furthermore, the knowledge that the company possesses may be seen as tacit which means that it is difficult to mimic and thus has a greater competitive advantage. These situational determinants impact the choices of the company and the greater the ownership and locational advantages the more likely the company will increase their investment into the target market. The impact of these advantages is subjective and directly relates to the company itself, therefore although there has been research on the matter, the advantages must still be analyzed specifically to the company in question. (Driscoll & Paliwoda, 1997)

There are several internal factors that also influence the chosen entry mode for a company when expanding to an international market. Based on their study on Danish SMEs entry mode choices, Hollensen, Boyd, and Ulrich (2011) acknowledged that the management of SMEs base their entry mode selection using intuition while multinational companies desire a greater level of control. Additionally, the greatest influence for choosing a high control entry mode, or wholly owned subsidiary was based on the factor of turnover. Meaning that the greater the turnover of the company the more likely they will invest in foreign markets using high control entry modes. On the other hand, companies who chose to use joint

ventures or strategic alliances had relevant personal networks and were also influenced by the interruption of the international activities (ibid).

Huang, Han, and Roche (2011) suggested that companies who use high control entry modes do so to diminish the risk of weakening intangible assets. Explicitly, controlled subsidiaries aid in protecting intangible assets such as brand value and a consistent customer experience. Inclination towards being established in the market, and thus the time required, is another factor influencing entry mode choice. Particularly, the usage of joint ventures is beneficial when a proactive response to competitive pressures is required (Toyne & Walter, 1989). Overall, there are several entry mode choices for companies when expanding abroad, influenced by the degree of control amongst other internal and external factors. The following sections will introduce the topic of international entrepreneurship which focuses more specifically on the born global perspective.

2.7. International Entrepreneurship

The term international entrepreneurship (IE) was established by Oviatt and McDougall (1994) after they realized through their study of new ventures that the current theories, in regard to the internationalization of companies, were unable to explain the speed and depth of these international ventures. The researchers combined the traditional theory with the alternative approaches found with these start-ups and concluded a framework seen below showcasing the sustainability of new ventures. Particularly in the Figure 2 below, sustainable start-ups control assets in regard to their unique expertise in order to create value in multiple countries. Their internationalization is rapid and widely spread because of the competitive nature of the domestic market. Hence, internationalized start-ups are specifically found in industries where international innovation and knowledge capabilities are seen as a governing aspect (ibid).

Furthermore, the researchers concluded that due to the limitations of resource capacities, start-ups focus on controlling rather than owning assets. This further introduces the idea that start-ups should utilize external networks or alliances as a protective mechanism to better the allocation of their scarce resources, focus on sources of competitive advantage, as well

as overall flexibility of the start-up (Oviatt & McDougall, 1994). IE start-ups are described using several different terms, including early internationalizing firms, international new ventures, however the most common label for them is as a born global firm (Andersson, 2011). These start-ups are regarded to as born globals, because several of these start-ups lack any experience in their domestic market or have very limited experience before starting their internationalization process (Cahen, 2019).

Face 1: Classification of the INV (International New Venture)



Figure 2: IE Framework (Source: Oviatt and McDougall, 1994)

After the initial term was introduced, research, specifically in case form has been conducted on the topic. Oviatt and McDougall (2005, p.540) continued their study on international entrepreneurship and updated their definition to describe the phenomenon as: “the discovery, enactment, evaluation and exploitation of opportunities – across national borders – to create goods and services.” Urban and Sefalafala (2015) simplified the term and defined it as the process of exploiting opportunities that are present beyond the domestic borders in order to create a competitive advantage. Dell’Anno, Evangelista, and Giudice (2018) firstly acknowledged that a single universal definition for IE has not been established but viewed IE as a new set of unconventional activities focused on value and growth creation in the international market. They specifically highlighted the combination of innovation and proactive, risk-taking behavior that takes place in the domestic country and crosses over to external borders. Particularly, because the initial research focused on product-based start-ups, researchers have found that these types of ventures focus on exporting as their main market entry strategy (Cavusgil & Knight, 2015). In addition, they determined there to be a strong relationship between the foreign assets and sales amongst the internationalization of these product-based start-ups (Cahen, 2019).

2.7.1. Drivers of Internationalization for Born Global Start-ups

Internationalization, particularly in start-ups, is a complex, multistep procedure with several difficult decisions during the entire process (Kraus et al., 2017). Born globals are difficult to fit into traditional internationalization models as from their initial creation they aim to have a competitive advantage through the use of resources and the selling of their product and services, in several international markets simultaneously (Oviatt & McDougall, 1994). As a result, the drivers of internationalization are also unique for start-ups. Technology-based start-ups have the tri-relationship of internationalization, innovation, and entrepreneurship embedded within their organization and thus their strategic decisions and overall growth are specifically linked to these terms (Onetti et al., 2012).

Particularly, research has found that new companies based on technology are impacted by globalization. As the current economy is becoming globally hypercompetitive in nature, the separation between local and international markets has become muddled. Now, born global start-ups are more interested in identifying and realizing opportunities, such as expansion to the international market rather than solely focusing on their own knowledge and marketing expectations (Dell'Anno, Evangelista, & Giudice, 2016). The main drivers of internationalization for these born global start-ups are based on the innovative abilities and managers' international market expertise. Strategic know-how of the international markets positively influences the willingness to go abroad when the ability and speed of the technological learning is high (Urban & Sefalafala, 2015). The speed of the internationalization depends on the level of competition, economies of scale, and demand and distance from customers (ibid).

Cahen (2019) specifically categorized high technology start-ups as ones in knowledge-based industries who see going abroad as a natural step of their strategy. In her research, she noted the drivers for high technology start-up internationalization and classified them into four main categories as seen below in Figure 3. The main driver is organizational abilities, with particular expertise in brand awareness that allow the company to understand and meet the demands of the international customers. Furthermore, specific capabilities of the entrepreneur including having international social capital, particularly referring to external networks also influence the decision of going abroad. Digital capabilities were also

expressed as significant influences on the desire to go abroad due to the knowledge-intensive nature of the industry. Lastly, external drivers including size of home market, governmental support, and partnerships with universities also positively impact the decision for the company to go abroad. Mort, Weerawardena, and Liesch (2012) add that new ventures can speed up their internationalization through the creation of opportunities, customer-centric innovative products, efficient resource enhancements, and quality assurance that attracts potential customers.

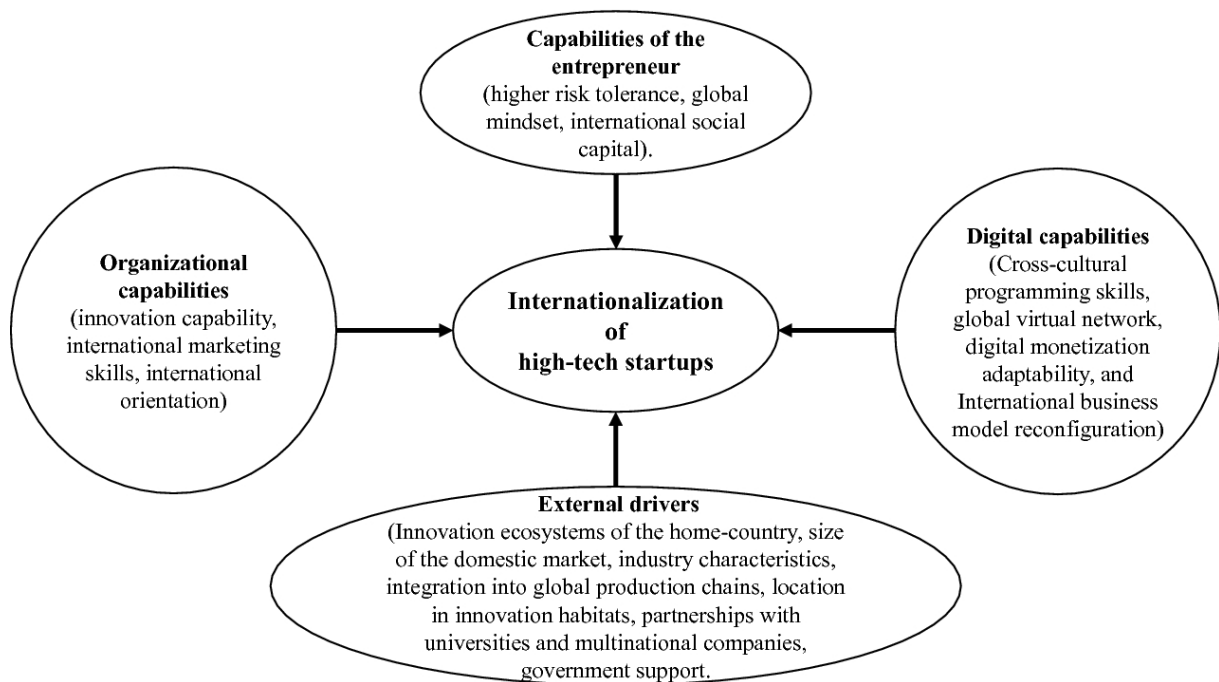


Figure 3: Drivers of High-Tech Start-ups Internationalization (Source: Cahen, 2019)

2.7.2. Case Research on International Entrepreneurship

The study of IE is still very fragmented particularly in digital start-up internationalization, even with the significant increase of digital start-ups who operate purely online in recent years (Cahen, 2019). McDougall-Covin & Rose (2015), also comment on the lack of generalized justifications, in regard to why and how new ventures create and execute their market entry strategies and whether or not they are successful.

Research has been conducted to better understand the idea of IE, for example Javalgi and Todd (2011), in their study of Indian new ventures, found that managers of the new ventures with previous international experience significantly influenced the desire and degree of

internationalization for the company. Furthermore, there was a strong correlation between entrepreneurial intensity and level of internationalization, particularly stating that the company's entrepreneurial mindset can positively impact their overall performance (ibid). Urban and Sefalafala (2015) confirmed these findings in their own study on South African SME's. They found that the intensity and capabilities of entrepreneurship influence the firm's inclination to internationalize and their overall performance. The researchers also concluded that to increase willingness and success of start-ups' international ventures as well as overall performance, these firms must place emphasis on innovation, risk tolerance, and continuous proactiveness. This is crucial in the development phases of their human and technology competences (ibid).

Although both studies were conducted in emerging economies, both set of researchers found that the environmental dynamism or hostility of the domestic market had limited negative influence on the internationalization of these ventures (Javalgi & Todd, 2011; Urban & Sefalafala, 2015). It can be concluded then, that the internal factors and capabilities within a new venture have more significance in the performance of the internationalization, and thus less pressure needs to be placed on the external factors of the company's society and overall environment.

However, in their analysis of the medical device start-up ecosystem in Korea; Lee, Park,, and Lee (2019) also acknowledged that entrepreneurial skills need to be improved to properly market the product through the usage of market analysis. They added that the medical device ecosystem differed from the typical start-up ecosystem due to the variety of influential stakeholders including policy regulators, government, patients, hospitals, other companies, and venture capital firms. Consequently, in order to achieve a successful initial market entry, an efficient and effective process must be created in order to properly manage all stakeholders during the market entry. Therefore, highlighting that the external environment does a play a crucial role in the internationalization process of a medical device start-up.

Effectuation theory, the capability of the entrepreneur to create market opportunities with the use of their networks has also been utilized to develop the understanding of how a born global firm develops and the importance of the entrepreneur. In his exploratory case study

research, Andersson (2011) found effectuation logic to be utilized by the Swedish born global start-up. The start-up successfully grew and internationalized with an initial vision of growth, as well as the entrepreneur's ability to see opportunities outside of the established plan. Specifically, the researcher concluded that successful internationalization could occur without extensive formal market research but rather a strategy focused on quick, resource efficient expansion. The use of entrepreneur expertise and partnerships with local independent distributors also aid in the success of the start-up. The effectuation approach is fitting for new ventures in the development of new markets as the purposeful strategy includes a known goal as well as opportunity seeking behavior (Mort, Weerawardena, & Liesch, 2012).

In the research conducted by Cahen (2019), she found that digital start-ups develop digital skills that allow them to enter markets without the use of foreign direct investment and with limited external assets and non-equity investments. On the other hand, product-based start-ups utilize more traditional ways of market entry via exportation and foreign direct investment. Kraus et al. (2017) found proper equity financing during the internationalization process, appropriate selection of relevant markets and proactive motives to be crucial for the potential success of the IE company. Lee, Park, and Lee (2019) concluded that when start-ups consider market entry strategies, they should reflect on the history of consumer purchases within their desired customer target segment. Start-ups should also understand the existing willingness to purchase the current products offered within the target customer segment. They mention this to be true, specifically for the medical device industry, because global corporate products are highly preferred. In other words, they are significant competitors which leads to the increase in barriers of entering the market.

The research on international entrepreneurship highlights the role of the entrepreneur in successful internationalization. Specifically, the research concludes that the entrepreneur's past internationalization experiences and knowledge play a significant role in the ability of the start-up to internationalize successfully (Lee, Park, & Lee, 2019; Andersson, 2011; Javalgi & Todd, 2011; Urban & Sefalafala, 2015). Furthermore, market entry strategies focused on lean usage of resources and partnerships with local networks are significant success factors for born global start-ups and their internationalization strategy. The network

relationships include those with distributors in the target market with a limited portfolio of products (Andersson, 2011).

2.7.3. Sales Channel Strategies of Born Global Start-ups

The sales channel strategy choice is the next essential phase of a particular market entry. The extensive research of large global firms and their internationalization has provided a clear understanding of their global sales channel strategies. However, researchers have noted that due to the novelty of the theory on international entrepreneurship, little academic research has been conducted on the specific sales channel strategies of these born global start-ups (Vapa & Vapa-Tankos, 2019; Gabrielsson & Gabrielsson, 2011; Arenius, Sasi, & Gabrielsson, 2005).

The online strategy is an essential aspect to consider when discussing potential sales channel strategies of born global start-ups. The available academic research on these sales channel strategies have found Internet-based sales channel strategies to be noticeably adopted by new ventures (Gabrielsson & Gabrielsson, 2011). The Internet has also been a key facilitator for born global start-ups, being the main driver for accelerated business development and internationalization, through the enablement of more efficient engagement with target customers (Bell & Loane, 2010). Customer acquisition along with quick market responsiveness are also positively correlated with the use of the Internet as a sales channel (Sinkovics, Sinkovics, & Bryan Jean, 2013). Globalization has played a crucial role in increasing the use of Internet-based sales channel strategies (Gabrielsson & Gabrielsson, 2011). Case study research has concluded that usage of the Internet as a sales channel can reduce the risk of foreignness for a start-up internationalizing (Arenius, Sasi, & Gabrielsson, 2005; Gabrielsson & Gabrielsson, 2011).

Online sales channel strategies have been determined to positively influence the export performance of new ventures (Sinkovics, Sinkovics, & Bryan Jean, 2013). The online sales channels strategies also diminish the requirement for several international operation modes such as physical sales subsidiaries, in the target markets, thus allowing the start-up to expand to more markets effectively and efficiency with the limited resources available to them (Arenius, Sasi, & Gabrielsson, 2005). However, online sales channel strategies as a

substitute for local market presence do not directly increase export performance for the start-up. This is because replacing sales agents may lead to losing crucial target market learnings as well as interactions with significant foreign customers (Sinkovics, Sinkovics, & Bryan Jean, 2013). Hence, born globals must go beyond the Internet to utilize a variety of channel strategies to ensure rapid and successful internationalization (Yoos, 2012).

Gabrielsson and Gabrielsson (2011) introduced the four main online sales channel strategies including direct sales channel, indirect sales channel, dual sales channel, and hybrid sales channel. The Figure 4 below showcases the channel and the distribution from the producer to the end customer via the different sales channel strategies. In the direct sales channel, the start-up is responsible for all channel functions and thus independently utilizes the Internet to sell the products to the customers. The indirect sales channels focus on initially selling through the internet via a local distributor. In this channel strategy, the distributor is responsible for customer generation and direct communication with the end customer.

Born globals have been found to utilize a combination of the direct online sales channel with separate indirect channels to generate a multiple sales channel strategy. In the first multiple sales channel alternative, dual sales channels, the start-up and their distributor work in parallel targeting separate customer segments. The start-up manages customers via online sales channels while the local distributors focus on separate segments of their local markets. Lastly, in the hybrid sales channel alternative the start-up and reseller work in conjunction, specifically utilizing the Internet to combine all activities. As a result, the start-up utilizes online sale channels for customer creation and retention to sell the products via the Internet. On the other hand, the distributor focuses on the product fulfillment actions to deliver the product to the customer. (Gabrielsson & Gabrielsson, 2011)

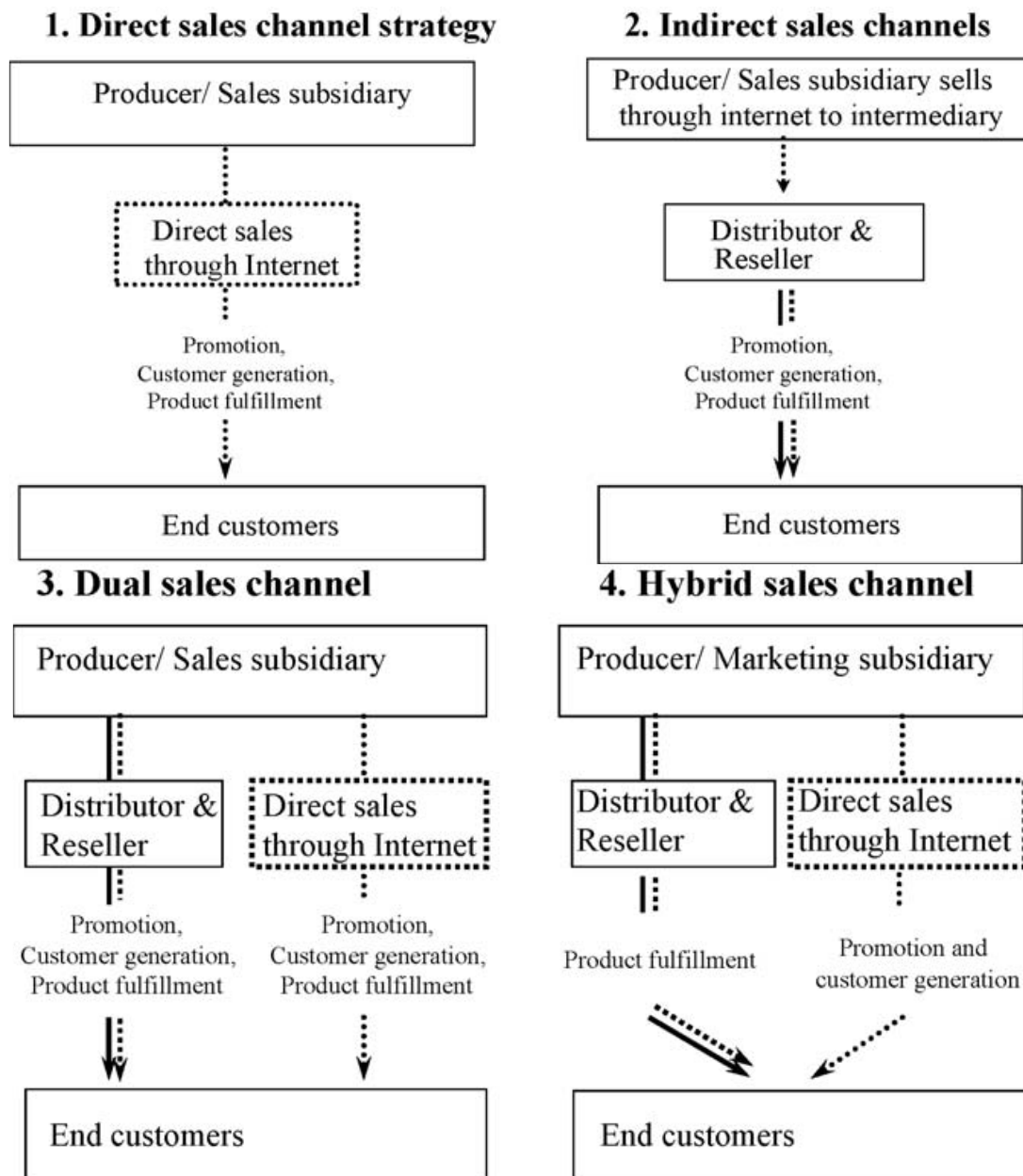


Figure 4: Internet Sales Channel Strategies (Source: Gabrielsson & Gabrielsson, 2011)

Research of specific case start-ups has been conducted comparing the use of these different online sales channel strategies to understand the best strategy for specific start-up types. In their multi-case study analysis, Gabrielsson and Gabrielsson (2011) found that the multiple sales channel alternatives increased sales potential, scope of customers, and reduced transactional costs compared to the single online sales channel strategies, particularly for the start-ups involved in their research. New ventures employing a cost leadership strategy are more motivated to choose indirect sales distributions as in-house distribution capabilities are inadequate and thus economies of scale are difficult to achieve. While new entrepreneurial

ventures who have a differentiation strategy, therefore focus on creating customized products, utilize direct sales channels. This is because it ensures better oversight and management of their customer relation activities (Brettel., Engelen, Müller, & Schilke, 2010). Globalization has also played an influential role in the usage of online based multiple sales channel strategies, specifically the use of dual and hybrid strategy alternatives has significantly increased in born global start-ups (Gabrielsson & Gabrielsson, 2011).

Business to consumer (B2C) born global start-ups are more likely to take advantage of online-based sales strategies, particularly when the sales volume is high, and the products are standardized in nature (Gabrielsson & Gabrielsson, 2011). The liability of foreignness is especially reduced when start-ups select online-based dual or hybrid sales channel strategies. Start-ups' use of innovative multiple channel strategies is also linked to former experiences of the entrepreneur specifically referring to past internationalizing, allowing for decision-making to be more flexible (ibid). Long-term channel relationships are a key factor of born global start-ups choosing multiple channel strategies. And particularly, hybrid channel strategies are chosen when the partnership benefits are important for the start-up. These include having reliable, dedicated relations, and limited conflicts with the partner. However, if the relative influence and power of the IE start-up is significant and channel conflicts can be tolerated, the start-up is more likely to utilize the dual channel strategy (ibid).

Overall, an effectively managed distribution network in the foreign target markets can substantially enhance the foreign sales potential as well as potentially increase the competitive position of the new venture in the particular market. However, disparities in distribution channels in different countries impacts the company's ability to apply the same sales channel strategy in their different foreign markets (Vapa & Vapa-Tankosić, 2019). Online sales channel strategies foster online presence with high visibility and positive quality signaling. In other words, online technological capabilities are valued initiatives and include proper support systems and customized experience for users. In addition, engaged online forums, specifically ones that discuss the product or service use, strongly correlate to successful international market entry pursuits of the IE start-up (Reuber & Fischer 2011).

2.7.4. Creation of Brand Awareness for Born Global Start-ups

The development of the brand to gain visibility is also essential in the internationalization process as market segmentation, precise targeting, and positioning must be acknowledged to be successful (Veloutsou & Guzmán, 2017). Global brand marketing strategies are crucial elements for globalized companies, however born globals and their brand awareness creation in international markets have not been thoroughly investigated. Particularly, the knowledge of the challenges faced by these companies with their branding efforts is limited (Gabrielsson, 2005; Altshuler & Tarnovskaya, 2010; Centeno, Hart, & Dinnie, 2013). The research on born global start-ups and the creation of brand awareness for their products and services have concluded with certain aspects of brand identity and awareness creation that are specific to international entrepreneurship start-ups and their internationalization process. Additionally, the digital transformation has required all companies, including new ventures, to ensure that valuable marketing communication through digital media channels is one of their main strategic management priorities (Karjaluoto, Ulkuniemi, & Mustonen, 2015).

The idea of branding is currently being influenced by the rapid changes of technology and increased commitment towards technology use. Consequently, the brand strategy of born global start-ups must be in line with both the globalization process as well as the current digital transformation occurring (Veloutsou & Guzmán, 2017). Specifically, in the medical device industry, along with the digital transformation, price is also seen as inelastic and both brand and product awareness are significant implications for a successful start-up (Lee, Park, & Lee, 2019). Research has also found a positive correlation between the values and positioning of a start-up's brand and the overall brand orientation as well as brand performance. This explicitly highlights the significant role the brand plays in consumer decision making when choosing between different products and services, which is the case for both start-ups and larger firms (Muhonen, Hirvonen, & Laukkanen, 2017). However, the development of new venture brands and awareness considerably differ from large company brand forming, due to minimized brand planning and constrained access to resources. Start-up brand development is innovative, experimental, and resource efficient by nature. As a result, the brand is found through several brand exploration phases that rely on trial and error and willingness to learn (Centeno, Hart, & Dinnie, 2013).

In their longitudinal research on a case start-up, Altshuler and Tarnovskaya (2010) concluded that the entrepreneur's unified brand vision and the firm specific capabilities, including its technological, cooperative and marketing communication strengths, are the key factors in successfully building a global brand. However, the new ventures' brand strategies during the globalization process differ amongst business to business (B2B) and business to consumer (B2C) focused start-ups. Specifically, researchers concluded that start-ups concentrated on directly selling to consumers, focus on establishing a global standardized brand while B2B start-ups utilize multiple brands in the selling of the products to their customers (Gabrielsson, 2005). Furthermore, brand creation and awareness are important to develop from the initial establishment, and thus the start-ups begin strategic planning of global brands for several markets in the first stages of development. B2B companies follow a parallel development strategy with their brands and global expansion (ibid). Furthermore, brand values have a stronger impact on brand positioning and vision for B2C start-ups compared to B2B targeting start-ups. The effect of the strategic approach for brand establishment on brand values is also more influential in start-ups focused on the consumer market because consumers have more appreciation for the intangible advantages of brands (Muhonen, Hirvonen, & Laukkanen, 2017).

Business to business and business to customer targeted start-ups also create awareness and visibility of their product or service and brand through the use of contrasting approaches. Start-ups, focusing on the end consumer market aim to create demand pull for their product or service, and focus on push-based marketing including innovative and cost-efficient marketing techniques (Gabrielsson, 2005). Continuous technological innovation and leadership along with focused marketing activities also result in demand pull for a start-up concentrated on the B2C market (Altshuler & Tarnovskaya 2010). On the other hand, B2B start-ups are able to utilize more innovative pull methods to gain brand visibility and awareness (Gabrielsson, 2005). Gabrielsson (2005) in his study of Finnish born global start-ups noticed that a B2C start-up utilizing a multiple sales channel strategy, needs to be personally involved in generating the end-consumer demand. This is because no single channel member is interested in providing visibility and brand awareness for an unfamiliar Finnish company. This means that B2C born global start-ups must utilize a variety of different low-cost promotion channels and approaches including online marketing, industry

fairs, editorial publicity, and piggy-back marketing to achieve visibility and an influential word-of-mouth result for their product and brand (ibid).

Academic literature on specific digital marketing strategies has been fairly limited, however in recent years research has been conducted to determine their ability to maximize visibility and create brand awareness. The academic research and consulting reports acknowledge particular marketing strategies that can be applied in the digital space to reach the new Internet-based consumer. The new phenomenon in attracting these particular consumers is in the form of digital inbound marketing, which includes a variety of methods such as: search engine marketing, content creation, social media presence, blog posts, and viral marketing (Opreana & Vinerean, 2015). Digital inbound marketing has been defined as a set of processes used to attract and engage consumers to online websites, with the main aim of nurturing these leads into prospective customers (Weidert Group, 2016).

Content marketing focuses on providing the consumer information in regard to their product and brand to try and alter consumer behavior in the hope to eventually generate sales. Content is created into different forms including videos, images, blogs, and infographics (Opreana & Vinerean, 2015; Järvinen & Taiminen, 2016). The new created content is particularly a valuable source of information in the MedTech industry. This is because the online patient forums and blogs detail the thoughts of patients. More recently, the digital transformation has led to the creation of professional networking sites in which patients and doctors alike engage virtually. For the MedTech companies, these sites provide insights into how to distinguish their product or service from others and potentially find new pockets of demand (PwC, 2020).

Search engine optimization (SEO) is a technique to optimize a webpage's ranking in the search engine browser by building several inbound links. Through content creation and specific keywords, a website can be enhanced to be more attractive for the search browser to display it in the top of the list, when consumers search for specific content. SEO is linked to published content of the website, and thus the more targeted the content to the consumer the more visibility the webpage gains (Opreana & Vinerean, 2015; Patrutiu-Baltes, 2016). Social media marketing has also been a powerful tool in order to create brand awareness, as the content is distributed across several social networks to reinforce the brand. The brand

authenticity also increases when sharing the content through different social media platforms, including Facebook, Youtube, Twitter, and Instagram (Opreana & Vinerean, 2015). This new form of inbound digital marketing allows the company to collect quality data to understand and track the perceived target customer through the use of data analytics. Although, it is complex and dependent on internet capabilities it can be concluded as a more advanced version of marketing, allowing for better utilization of a company's marketing budget (Patruti-Baltes, 2016; Weidert Group, 2016).

Overall, this chapter presented an objective look into the academic literature of international entrepreneurship, specifically analyzing the sales channel and brand awareness strategies of born global start-ups and their international foreign market entries. The continuously changing environment highlights the novelty and importance of the subject matter and the understanding of the effects of the current digital transformation. In conclusion, more longitudinal case study research should be conducted to understand how current born globals can utilize the digital transformation to their advantage when internationalizing, specifically in their usage of sales and digital marketing channel strategies.

2.8. Conceptual Framework to Case of Medical Technology Start-up

The purpose of this conceptual framework is to utilize the academic research discussed above and tailor the findings to a medical technology start-up, the specific focus area of this thesis. The adapted conceptual framework will apply the theories and areas of study from the literature on international entrepreneurship to the case of a MedTech start-up (Oviatt & McDougall, 1994). The aim of this framework is to illustrate the best fitting market entry strategy, in terms of sales and marketing channel strategies for a MedTech start-up and their diabetes monitoring wearable device to the Indian market. The framework will specifically concentrate on how the start-up could create optimal brand visibility and sales volume. Furthermore, this framework will utilize a combination of different frameworks from the previous literature including the Four Main Internet-based sales channel strategies, Drivers of High-Tech Start-ups Internationalization, and the Business Model Canvas (Gabrielsson & Gabrielsson, 2011; Cahen, 2019; Osterwalder & Pigneur, 2010).

The framework below, Figure 5, is an adaptation of Gabrielsson & Gabrielsson (2011) framework, the Internet-based Hybrid Sales Channel. The particular framework also contains the academic literature, analyzed in the previous sections. Specifically, this conceptual framework illustrates how the Med-tech start-up could potentially utilize the hybrid sales channel to enter the Indian market. Therefore, focusing on direct online sales to the end customers in the Indian market while having a local partner, an Indian distributor, to help them manufacture the product.

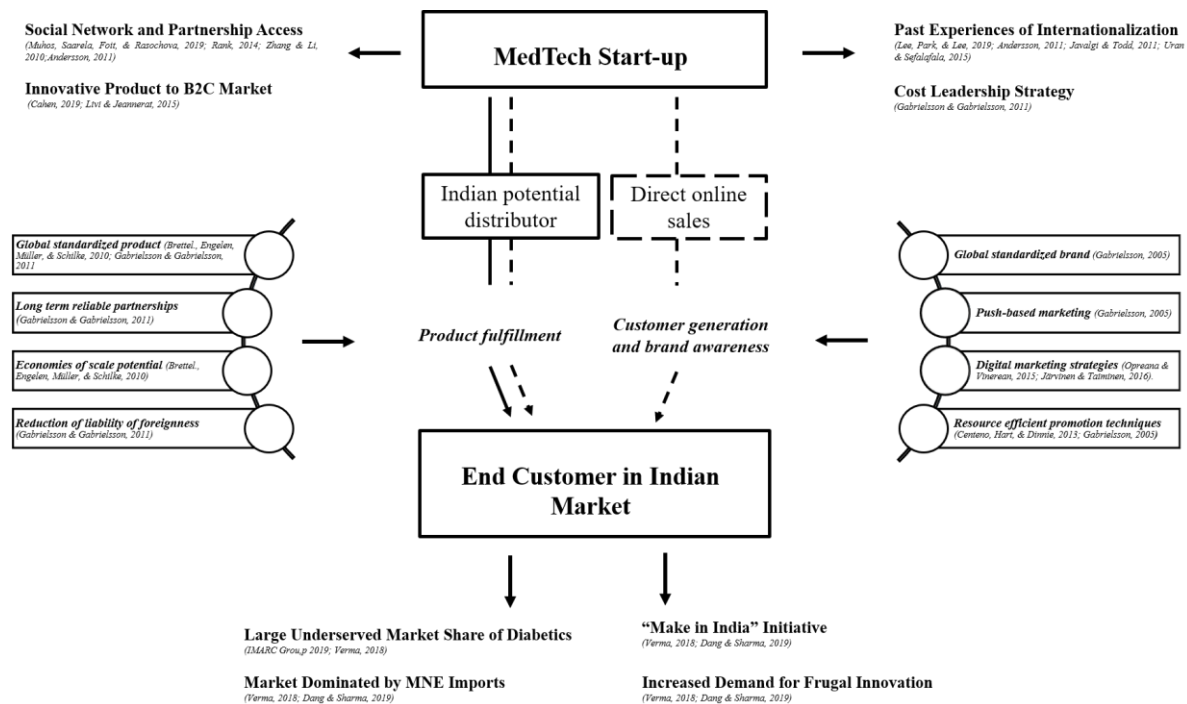


Figure 5: Thesis Conceptual Framework (Source: Gabrielsson & Gabrielsson, 2011)

Initially it is important to understand the drivers of internationalization; specifically, the capabilities that allow the start-up to be successful in their market entry (Cahen, 2019). The particular MedTech start-up, is developing an innovative product that is unknown in the current diabetes monitoring market, while utilizing the cost leadership strategy to focus on the underserved patients. The previous literature on IE has also stressed the significance of the entrepreneur's knowledge and internationalization experiences on the ability for the company to successfully enter a foreign market (Lee, Park, & Lee, 2019; Andersson, 2011; Javalgi & Todd, 2011; Urban & Sefalafala, 2015). As a result, this knowledge is included as one of the potential drivers of internationalization for the start-up. Furthermore, having access to social capital and potential local partners as their distributors, with a limited number of products in their portfolio, is a valuable benefit that the company may potentially possess. This increases their chances at success in the foreign market (Muhos et al., 2019; Rank, 2014; Zhang & Li, 2010; Andersson, 2011).

The end customer, the Indian market, is the next aspect to reflect on in the framework. The target market is a given for this thesis as the start-up is specifically interested in entering the Indian market during their first internationalization phase. Hence, it is important to reflect on the benefits and barriers of the market based on written literature, which can be concluded from a PESTEL analysis (Sammut-Bonnici & Galea, 2014). Figure 6 below illustrates a

limited idea of the Indian business environment, using the dimensions of the PESTEL model. This thesis focuses on a potential plan to market entry, therefore the specific details of starting a business in India will not be examined but rather the focus will be on determining the general business environment.

Political	Economic	Social	Technological	Enviromental	Legal
<ul style="list-style-type: none"> • 63rd in Ease of Doing Business Ranking • 'Make in India' governmental initiative • Progressive policies to increase transparency and ease of FDI 	<ul style="list-style-type: none"> • 2nd fastest growth economy • Top ranked for greenfield FDI • 3rd largest Asian economy with PPP • 70% of medical devices imported 	<ul style="list-style-type: none"> • 65 million diabetics • 6 trillion USD consumer spending by 2030 • Strong MedTech consumer brands 	<ul style="list-style-type: none"> • Installing industrial manufacturing parks to create medical devices • Demand for frugal innovation 	<ul style="list-style-type: none"> • Low public health awareness and education of chronic diseases, i.e. diabetes • Desires to increase access to quality healthcare for majority of Indian population 	<ul style="list-style-type: none"> • Increasing duties for imported final goods to reduce trade imbalance • Online filings and single point clearances • Use of non-tariff barriers

Figure 6: PESTEL Framework of India (Source: Sammut-Bonnici & Galea, 2014)

The Indian market has roughly 65 million diabetics with several areas and individuals currently being unserved and lacking awareness of treatment options (IMARC Group, 2019; Verma, 2018). The Indian market and consumers are demanding frugal innovation, thus low-cost medical devices focused on chronic disease treatment such as diabetes. Through these new medical devices, the government and citizens hope to increase accessibility to quality healthcare for a majority of the Indian population (Verma, 2018). Additionally, the combination of being the second fastest growing economy and the liberalization of the regulatory structure has boosted India's attractiveness for foreign direct investment (PwC, 2012). New progressive policies have led to an increase in India's Ease of Doing Business ranking, to 63rd along with being globally top ranked in greenfield FDI rankings (Invest India, 2020). Although, the government is taking initiatives to increase ease and transparency in administrative load, through the use of online filings and single point clearances, the bureaucracy and challenges within the procedural load are still found to be difficult for interested investors. Therefore, more can be done to facilitate the proceedings (SKP Group, 2017). In terms of India as a consumer market, it is the third largest Asian economy in regard to purchasing power parity (PwC, 2012). Specifically, in terms of consumer spending, India is seen to become the third largest with six trillion USD spending by 2030 (Invest India, 2020).

The current diabetes treatment market is dominated by multinational companies and over 70% of all medical devices are being imported to India (Dang & Sharma, 2019). These MNEs have strong consumer brands and a large portion of the overall market share and thus add to the difficulty of entering the competitive market. However, to combat this and increase medical device manufacturing in India a new initiative “Make in India” by the Indian government has been established. The initiative is focused on reducing costs of manufacturing in India and placing higher duties on finished goods in order to fix the previously inverted duty structure. The previously known structure made importing of finished goods more attractive versus the importation of raw materials for domestic manufacturing (SKP Group, 2017). India has also utilized non-tariff barriers, which include technical regulations, sanitary rules, quotas, domestic content schemes (PwC, 2012). Their overall aim is to incentivize both domestic and global companies to move manufacturing to India (Dang & Sharm, 2019). The government is specifically interested in creating an efficient domestic ecosystem for medical device manufacturing. This includes installing industrial parks to create quality and affordable products (SKP Group, 2017). The main motivation of these regulatory and policy framework changes is to lower the price of healthcare and reduce the current trade imbalance (PwC, 2012).

The literature research insights from the PESTEL framework are summarized in the previously showcased Figure 5 conceptual framework to highlight the main opportunities and obstacles of the Indian market. As a MedTech start-up in question is utilizing a cost leadership strategy, they can potentially attract the underserved market interested in frugal innovation with their low cost, quality product (IMARC Group, 2019; Verma, 2018; Dang & Sharm, 2019). On the other hand, currently the market is dominated by large MNEs and exporting costs are increasing with governmental policies emphasizing domestic manufacturing (Verma, 2018; Dang & Sharm, 2019). Therefore, a MedTech start-up must consider the competitive environment prior to their market entry and potentially utilize the local distributor to their advantage, by manufacturing their product in India.

In order to generate customers and visibility in the market, through online sales, the MedTech start-up should focus on low-cost push marketing techniques that create the demand pull for their product (Gabrielsson, 2005; Centeno, Hart & Dinnie, 2013). Due to the limited resources, the start-up should focus on digital marketing strategies including

content and social media marketing (Opreana & Vinerean, 2015; Järvinen & Taiminen, 2016). The use of digital push-based marketing results in the word-of-mouth affect as the first customers communicate online to others about the product and generate engaged online communities (Reuber & Fischer 2011). Before entry, as the focus is on B2C, the brand must be standardized with a globally unified brand vision for it to be clearly communicable to the consumer (Gabrielsson, 2005).

On the Indian distributor side, the hybrid sales channel is chosen as the best option because the MedTech start-up, illustrated in the framework, is currently developing a standardized product that does not require personalization for certain customer groups (Brettel et al., 2010; Gabrielsson & Gabrielsson, 2011). Furthermore, as typical for start-ups, the MedTech start-up in question currently lacks market power and therefore needs to have reliable long-term partnerships with its local distributors (Gabrielsson & Gabrielsson, 2011). The Indian market is completely unknown to the start-up and thus developing a partnership with a local partner will reduce the liability of foreignness (Gabrielsson & Gabrielsson, 2011). Lastly, due to the limited resources available to the company the ability of in-house economies of scale is difficult to realize and employing the local distributor will help with the product fulfillment (Brettel et al., 2010).

Overall, the framework presented in this section is merely adapted from the academic literature on the international entrepreneurship theory and fit to the area of study of this thesis, thus MedTech start-ups. The following chapters will discuss the methods of study for this thesis and introduce the chosen data collection approaches. Accordingly, this conceptual framework will be utilized as a base for the empirical research and the findings from the research will in turn be applied to the framework. The final conceptual framework will include both the findings from the literature review and the empirical research to showcase a potential market entry strategy, in terms of sales channel and brand awareness strategies, for a medical technology start-up to the Indian market.

3. RESEARCH DESIGN AND METHODOLOGY

The previous chapter discussed the current literature on market entry strategies and particularly analyzed research on international entrepreneurship, which focuses on start-up internationalization. This chapter provides understanding of the design and methodology chosen for the empirical research of this thesis. The purpose of this thesis is to contribute to the international entrepreneurship theory. Specifically, the thesis aims to determine a potential market entry strategy for a medical technology start-up to the Indian market, under the case of LAKKA Health Oy and their hypoglycemia detection wearable device. The methodology approach must focus on studying a specific phenomenon with an explicate context (Von Krogh, Rossi-Lamastra, & Haefliger, 2012). In this section the appropriate methodology approach between qualitative or quantitative research will be discussed; as these are the main methods utilized in business research to understand how and why specific things occur (Cooper & Schindler, 2014). Furthermore, the data collection method will be identified and discussed, specifically detailing why this method was chosen. This section will conclude with an analysis of the validity and reliability of the research.

3.1. Research Approach

The most relevant research method to fit the research questions is the qualitative research approach. This is because it aims to decode and find meaning in naturally occurring phenomenon (Eriksson & Kovalainen, 2008). On the other hand, quantitative research is focused on finding precise measurement and testing hypotheses (Cooper & Schindler, 2014). The quantitative approach is not suitable for this research because this research focuses on gathering data to determine how a medical technology start-up could enter the chosen market. Consequently, the quantitative method will not produce enough descriptive data that can be categorized into particular themes to gain a full understanding of why the chosen methods are the best fitting for the company (Saunders, Lewis, & Thornhill, 2009). According to Eriksson and Kovalainen (2008), qualitative research is applicable when the phenomenon to be studied is unstructured in nature allowing for flexible research. The start-up analyzed in this research is still in the developmental stage and has no experience in

internationalization, meaning it is necessary to be experimental, which is a trait of the qualitative method.

In qualitative research, the researcher aims to have close relations with the subject matter which means that objectivity is not as important compared to that in quantitative research (Bryman & Bell, 2011). In this research on a single case study, the researcher is in close relations with the case company to ensure full understanding of the context and issue at hand. Furthermore, while qualitative research aims to create theory; the quantitative research focuses on testing theory (Cooper & Schindler, 2014). The proposed research questions also focus on understanding the issue at hand and are exploratory in nature, which is another characteristic of qualitative research. Therefore, it is the appropriate approach to find the explanations for the given subject matter (Bryman & Bell, 2011). Lastly, as there is no actual data from previous market entry experiences, the use of the quantitative method or analysis of numerical data is advertently not possible (Cooper & Schindler, 2014).

When conducting qualitative research, the researcher must also reflect on the epistemological and ontological positioning, in order to acknowledge one's perspective and degree of scholarly contribution to the particular phenomenon (Eriksson & Kovalainen, 2008). For this study, the critical realism approach will be utilized. The aim of critical realism is to identify structures that appear in nature. In critical realism, behavior is dependent on social constructions, but there is also reality independent of these. However, the dependent aspect means that there is a phenomenon needed to be studied (Farquhar, 2012). Furthermore, this approach acknowledges that the visible world is independent from human consciousness, however because this approach is not empirical in nature, the perceptions are not based on sense-making (Bell, Bryman & Harley, 2018). This research aims to address a potential market entry strategy for a medical technology start-up to the Indian market, specifically looking at potential sales and marketing channel strategies. Therefore, this factual-based approach correlates well with the aim as the research on the phenomenon will be conducted as it appears. Both theoretical and empirical research will be applied to answer the question and thus the researcher's own perceptions and feelings will not influence the research.

3.1.1. Exploratory, Single Intensive Case Study

As mentioned above the research question specifically focuses on a potential market entry for a MedTech start-up with their medical wearable bandage, thus the most appropriate research design is the case study approach. The case study approach permits the researcher to investigate this phenomenon within its context (Farquhar, 2012). The case study approach also allows for a holistic understanding of the phenomenon with the use of several empirical sources (Eriksson & Kovalainen, 2008). The two main types of case studies are intensive and extensive. In intensive case studies the focus is on a unique case in which broad and specific descriptions are gathered from the research. Whereas extensive case studies utilize several different cases to compare and form generalizations (Eriksson & Kovalainen, 2008). As it was agreed upon that this thesis will be written for the case company, the approach will be on a single intensive case study, particularly focusing on in-depth analysis and the development of a potential market entry strategy for them and other medical technology start-ups (ibid).

As the research being conducted is the initial research into the market entry strategy the case company could utilize and potential recommendations will be developed for them, the exploratory method is the chosen one for this research (Yin, 2017). Any phenomenon within the data is utilized as a point of interest for the researcher in exploratory case study research (ibid). Furthermore, prior data collection is encouraged with exploratory research. In this case the initial data collected formed the literature review of the thesis, specifically the primary conceptual framework of the study was developed (ibid). Furthermore, the research is inductive in nature because possible definitions and theories are being drawn from the observations made (Bell, Bryman, & Harley, 2018). The inductive approach is the most suited for the research question as it aims to describe what is occurring with this start-up rather than exploring a particular theory behind international entrepreneurship. Therefore, the research design for this thesis will be an exploratory, single intensive case study.

3.2. Research Context

The research context for this thesis is the medical technology industry and the Indian market. The medical technology industry has been impacted by the digital transformation and discussed under the umbrella term of eHealth. The industry was particularly detailed in the literature review of this study. Specifically, digitalization has been influential in the development of the current healthcare system, with new ventures focused on digital innovative products and services to be globally success (Saarela et al., 2018). The healthcare systems are struggling to remain sustainable with their current models, particularly due the increasing prevalence chronic diseases (Van Limburg et al., 2011). As a result, eHealth start-ups have the potential to improve the healthcare sustainability (Chowdhury, 2012). Therefore, it is beneficial to study medical technology start-ups and how they can enter the chosen market, to understand the internal and external issues that need to be considered.

The Indian market as the target market was a given for the thesis by the case company, LAKKA. Hence, it is important to discuss the literature of the current business environment of India and its impact on the market entry strategies that can be applied by the medical technology start-up. A market selection analysis of India was detailed in the literature review of this thesis, and thus in order to avoid unnecessary repetition it will not be explicitly mentioned in this section. However, it is important to acknowledge the Indian market as an important aspect of the research context of this thesis. Overall, the interesting research context, predominantly the medical technology industry and the Indian market, allow this thesis to contribute to the international entrepreneurship theory. Additionally, it is important to acknowledge the case company of this thesis, hence the next selection will introduce LAKKA Health Oy.

3.2.1. Introduction of the Case Study

The thesis focuses on determining a potential market entry strategy, in terms of sales and marketing channel strategies, for medical technology start-ups to the emerging economies. This was conducted through the case study approach of a Finnish start-up, LAKKA Health Oy, and their hypoglycemia detection wearable device to the Indian market. The start-up is currently developing a 'HypoSense' hypoglycemia detection wearable bandage that is non-

invasive meaning a needle free measurement tool. The smart wearable patch works similarly to hypo-dogs, as it detects the blood through sense of smell. The device is unable to detect the current blood sugar level rather it detects changes in the blood sugar level either up or down and determines whether the patient is going into a hypoglycemic or hyperglycemic state. The current diabetes monitoring market include self-monitoring of blood glucose (SMBG) and continuous glucose monitoring (CGM) devices. Diabetics measure their blood sugar themselves using a glucose meter with the SMBG method. While the CGM devices continuously and automatically take glucose measurements and track them throughout the day utilizing a small sensor inserted into the body (Ajjan, Slattery, & Wright, 2019). The product that LAKKA is currently developing does not fit into these two monitoring practices and thus must be classified as a new and separate monitoring method for diabetes.

Currently, the start-up has seven employees with an investor, thus it is still in the small-scale stage. The product is in the technical feasibility stage of development and LAKKA is collecting evidence on what exactly the device is able to do in order to find the correct target market segment. In the first discussions with the company, LAKKA hoped to enter the market by the end of 2021 after receiving the CE mark certificate required to sell their product in the European Union. The required clinical tests were to begin in the Spring of 2021 to achieve the CE mark certificate. It is important to note that these tests require an extensive amount of resources and time.

The start-up's initial market entry plan included entering Finland and then Sweden in quick succession, as well as a third European country, that has a large diabetic's market, and lastly, they had received leads to potentially enter the Indian market. The start-up has been in discussions with a potential local distributor in India, interested in manufacturing and selling their product both in the Indian and global markets. The company is currently receiving market research analysis consulting from another company to understand the best markets within the EU to enter in their first round of internationalization. Specifically, the consulting research is focused on understanding the market of each country, number of diabetics in the country, and overall, the ease of entering the market with a medical device. Consequently, because the Indian market is unknown to the start-up, it was confirmed that this thesis would mainly focus on the potential market entry to India. Although, the start-up will potentially have the help of the local distributor they wanted to understand the potential and feasibility

of the Indian market. In addition, they wanted to understand the type of market entry strategies in terms of sales channels and marketing strategies that would allow them to gain optimal visibility and sales, with the interest in potentially disrupting the market.

However, during the thesis process, the direction and classification of the hypoglycemia detection wearable bandage was still undetermined. During the thesis process, the company realized the ability to categorize the wearable device as a wellness product to avoid the highly regulated and cost heavily requirements needed to classify it as an EU accepted medical device. The approval process for the certified medical device status requires compliance with the EU Medical Device Regulation (MDR) and the device needs to meet all regulatory requirements for medical devices (European Parliament and Council, 2020). As a start-up with limited resources, the process would be both time consuming and costly because of the extensive clinical test requirements needed to achieve the medical device certificate.

LAKKA thought of the possibility to classify their product as a consumer wellness product meaning it would need to comply to general regulations but would not require the external organization auditing the safety of the product. Meaning with this classification LAKKA can still make the same claims and highlight its accuracy with patient tests, however in the fine print they would have the self-declared CE mark certification. They realized though that if their product is not classified as a medical device in their marketing they are unable to connect the device usage to a specific disease, which means they cannot directly say this device is used for diabetes monitoring. As a result, the question of whether to go to the market as a certified medical device or wellness product remained open for the start-up.

The main question for them currently is to understand how to achieve visibility in the chosen target market, specifically the potential to disrupt the market with their new hypoglycemia detection device. In particular, when the product does not belong to the current diabetes monitoring practices and is unknown to the general population as a potential method of monitoring diabetes. It was jointly decided with LAKKA that market entry strategies are target market specific, therefore in this thesis the scope will be narrowed to only analyze the potential market entry strategy to India. However, this market entry example can be altered and utilized for other potential market entries for medical technology start-ups

Their initial strategic plan focuses on a cost leadership strategy. The start-up is currently able to keep production costs low and predict this to be true in the future, thus emphasizing mass production for their product. Furthermore, the company acknowledged the desire for the product to be accessible to everyone. LAKKA recognizes the market gap in affordable and non-invasive wearable devices for hypoglycemia detection. They particularly see that children are underserved and not considered with the invasive devices that involve a needle. Overall, these initial discussions with the company, aided in forming the interview questions both with internal employees of the company and to understand who to interview in the external network.

3.3. Qualitative Data Collection

This section details how the qualitative data was collected for this investigation. As the research focuses on an intensive, exploratory case study, the focus is on collecting data to form recommendations for MedTech start-ups. This was done via the context of LAKKA and their hypoglycemia wearable device to the Indian market (Yin, 2017). The empirical research of this thesis was collected mainly through the use of interviews. LAKKA also gave access to PowerPoint presentations introducing the start-up and product as well as the potential strategy outlook for 2025. However, because the start-up is still in the development stage, they have limited data to access. Consequently, the main focus of the empirical research was to analyze the case study through the use of interviews rather than through data or financial information.

Hence, the semi-structured interview method process will first be detailed. The initial semi-structured interviews were conducted with current employees of LAKKA to understand their current situation and motivations for market entry. However, in order to answer the research question, external empirical data needed to be collected to understand the Indian market. Interviews were also conducted with other similar companies that have successfully employed certain sales and marketing channel strategies which could be potentially implemented by a MedTech start-up such as LAKKA. Therefore, the sampling approach for the external qualitative data collection was both snowball and opportunistic (Farquhar, 2012). Some of the contacts were given by LAKKA as they acknowledged that they would

be appropriate for providing the necessary information. Yet, the external companies that were interviewed were additional leads found from unexpected sources (ibid).

3.3.1. Semi-Structured Interviews

The primary data collection method chosen for the case study on LAKKA Health Oy is interviews as they are the most popular data collection method utilized for case studies in the field of business (Eriksson & Kovalainen, 2008). Specifically, individual depth interviews, particularly semi-structured interviews were conducted for this research. The semi-structured aspect allows the interviewer to have a premade list of questions but also allows for flexibility to add sub-questions during the interview (ibid). Therefore, the interviews will be informal in nature but ensure a consistent focus on particular topics (Saunders, Lewis, & Thornhill, 2009). This method was chosen to allow the interviews to be informal and open, but also ensure that the focus was on the topic of market entry strategies, specifically looking at sales and marketing channel strategies. It is important to mention that the exploratory nature of the research did not direct the interview questions. Therefore, although the conceptual framework was formed prior to the interviews the questions remained open, allowing for the possibility of the empirical findings to contradict the academic literature. Interview guides were used in this thesis and detailed the open-ended interview questions.

The interview guide is a preparation tool for semi-structured interviews as it ensures that key discussion topics are addressed but also allows for flexibility and gives the chance for the interviewee to express their own individual thoughts (Cooper & Schindler, 2014). As the interviews conducted were both with internal employees and external experts, interview guides were written for each specific interview. The interview guide for the internal employees focused on understanding the current situation of the start-up, their business model, and the reasons behind the desires to enter the Indian market and can be found in Appendix 1. The interview with external experts in understanding the Indian market, particularly focused on the Indian market outlook as well as potential sales and marketing channel strategies that are successful in the market. This interview guide can be found in Appendix 2. The interview guide with a Finnish health technologies (Healthtech) expert focused on understanding the Healthtech environment within Finland and the role of these

supportive institutions; the interview guide can be found in Appendix 3. The interview guides with the external comparative companies focused on their successful implementation of particular sales and marketing channel strategies and can be found in Appendix 4 and 5, respectively.

The interviews took approximately 60 minutes and were conducted via Zoom or Microsoft teams due to accessibility reasons. Bryman (2012) notes that telephone, skype or other online tools are acceptable when interviewees are in different geographical areas. This was the case for the thesis as well as the current COVID-19 crisis making it difficult to meet in person. This tool also allowed for a greater variety of participants to be interviewed as well as being more cost effective. It is however important to note that utilizing online tools for interviewing means the loss of certain non-verbal cues which can create misinterpretations. The interviews were conducted in Finnish and English, dependent on the mother tongue of the interviewee. Consequently, the Finnish interview transcripts had to be translated into English for this thesis, As a result, it is necessary to remark that certain phrases could have potentially been lost in translation and lost their initial meaning, impacting the legitimacy of the empirical findings. Nevertheless, each interviewee was told the purpose of the interview, specifically the main research question, the right to withdraw any information, and lastly asked whether they wished to keep their anonymity. All the interviewees signed a consent form to be a part of this thesis and agreed to have their names and organization names published.

3.3.2. Interview Process

The first interviews were conducted with two chosen employees from the case company. These two specific interviewees were chosen as they provided sufficient information on the current status of the company and the motivations behind the desired market entry. The two different employees allowed for differing perspectives on the company and their knowledge, however ensured that the interviews were not too repetitive in nature. The remaining five interviews were conducted with external players with expertise in the Indian market, Healthtech industry, and comparative external companies. As noted, the interviews chosen for this research followed both the snowballing and opportunity sampling method. This is because the case company's, CEO and Quality Manager, the initial interviewees, provided

the names of who to interview from Business Finland, for the expertise in the Indian market, and Healthtech Finland, for the expertise in the Finnish Healthtech industry. However, the sampling was also opportunistic in nature because the initial Business Finland contact was unable to help and provided an external consulting company, T&A Consulting, that was willing to be interviewed. As a result, both methods worked well for this exploratory research as the first two interviewees provided key actors who had the desired information, however additional leads were provided by the unexpected source of Business Finland (Eriksson & Kovalainen, 2008).

LAKKA is a member company of Healthtech Finland. Healthtech Finland is an industry association that operates as an integral part of the technology industry. It specifically promotes the competitiveness and operating potential of Finnish technology companies. And specifically aims to facilitate the growth and internationalization of the health technology market (Healthtech Finland, 2020). T&A Consulting is a consulting company that works with international companies wanting to enter the Indian market. Their aim is to give companies the competitive advantage by providing them with their expertise and with several different services. These include India market entry analysis and local partnership research and analysis (T&A Consulting, 2020).

The remaining three interviews focused on comparative external companies that have successfully implemented specific sales and marketing channel strategies. The finding of these companies was opportunistic in nature as one was found through a newspaper article and the others through a personal contact. It is important to acknowledge that these external companies are not additional case companies for this thesis, rather the interviewees were viewed as experts in their respected fields and their knowledge was deemed highly beneficial for this research. The external companies and discussions in regard to their strategies are mentioned explicitly in the thesis. However, the most important take away is the opinions from the interviewees, rather than reflections about how their companies operate.

Accordingly, Suunto and SELKA Oy were chosen because of their potential comparative nature to the case company, LAKKA. Suunto is a Finnish SME, specifically a manufacturer of sports watches, dive products and other precision accessories for a variety of conditions (Suunto, 2020). Suunto has a strong international brand providing wellness products directly

to consumers. LAKKA's goal is to create a recognized brand for themselves and the wellness product is one of the routes it is currently considering. Suunto has internationalized to the Asian market, and therefore can provide beneficial insights in the sales channel and marketing strategies that can be plausible in these markets, particularly the Indian market. Suunto's Head of Asia also has extensive knowledge and opinions in regard to the Indian market due to her experiences in the market.

SELKA Oy is a small Finnish manufacturer of customized office furniture. Due to the current COVID-19 crisis they have shifted their focus to selling directly to customers who are now working remotely from home. The company's most popular product is the adjustable sit-stand table (SELKA, 2020). The small company has focused their strategy on the international market and have experienced high growth and sales. Although the company is in a completely different industry to LAKKA, the company is still small in nature with roughly a million in turnover annually and it is providing a new type of furniture to consumers. This is similar to LAKKA with their new diabetes monitoring method that must be taught to the target segment. Furthermore, the company is mainly focused on their international market, and not the domestic market, which is also the aim for LAKKA. Lastly, SELKA has been noticed for its successful social media marketing strategies and can provide plausible options for LAKKA to consider and apply.

However, it is imperative to note that there are several differences between these two companies and the case company of this thesis. Firstly, Suunto is a globally recognized brand with millions of sales and roughly 60 million revenue annually. On the other hand, SELKA Oy is a small company with only thousands of products sold annually. Consequently, the companies cannot be directly compared to each other. The findings, and more specifically the strategies utilized by these companies from the interviews also cannot be directly applied to LAKKA. The findings are rather seen as mere suggestions that the case company can potentially adapt and apply to their own case. Overall, the details of each interviewee are provided in the table below.

Table 1: Interview Data

Company	Interviewee Name	Interviewee Title
LAKKA Health Oy	Heidi Peltolehto	Quality Manager
LAKKA Health Oy	Sami Lakka	CEO & Founder
Healthtech Finland	Sandra Liede	Legal Expert
T&A Consulting	Tarun Gupta & Gaurav Singh	Managing Partner & Engagement Manager
Suunto	Sami Arhomaa	Head of Commercial Product Portfolio
SELKA Oy	Juha Nevalainen	CEO
Suunto	Sharmin Photographer	Head of Asia

3.3.3. Secondary Data Sources

Secondary data sources were also utilized in the research, explicitly regarding to the direct and potential competitors of LAKKA. Secondary data is defined as empirical data existing as published textual data (Eriksson & Kovalainen, 2008). The specific secondary data utilized in this thesis is in regard to the electronic form, thus online databases. These online databases are a common technique used in qualitative research (ibid). Company websites were researched in order to analyze and determine the competitors of LAKKA and their potential value propositions. This limited competitor analysis was added to the thesis as it is beneficial to understand the competitive surroundings within the industry and these issues were only minimally brought up in the empirical interviews.

3.4. Data Analysis

This section details discussions about the data analysis method chosen to process the data collected. Specifically, the chosen approach is a mixture of both the deductive and inductive approaches. The result is qualitative thematic analysis, which identifies common threads or themes in the data being analyzed by the researcher (Eriksson & Kovalainen, 2008). The themes are discovered through a process of coding the data into identified topics (Bell, Bryman, & Harley, 2018). The empirical themes compared alongside the theoretical research, to find compatibilities, aid in answering the main research question and sub-questions of this thesis (Eriksson & Kovalainen, 2008).

In qualitative thematic analysis, the researcher analyzes and identifies the interviews to find similar threads and themes. In this process, the data was firstly categorized and then interpreted and analyzed more in-depth (Eriksson & Kovalainen, 2008). The coding process is an influential part of the subsequent analyzed data, because through this process certain themes are uncovered from the interviews (Bell, Bryman, & Harley, 2018). The inductive method was specifically utilized for the thematic data analysis, because the derived coded themes did not come from existing theoretical idea, rather directly from the transcribed interview transcripts (Farquhar, 2012). Although, the literature review section concluded with a conceptual framework, this framework was not used as a data source for the analysis of the interviews. Instead these two will be compared in the discussion section to determine the potential similarities and differences amongst the theoretical and empirical data (Eriksson & Kovalainen, 2008).

The six-step guide discussed by Braun and Clark (2006) in their article was used after each interview. Hence, the data was first familiarized with, then all verbal data was transcribed, which generated the initial codes to find themes. A spreadsheet with the transcribed data was utilized to make sense of the data and form possible themes from what the interviewees expressed. The themes were further reviewed and categorized and finally the themes were revealed, bringing both structure and transparency to the data analysis. Appendix 6 showcases an example of the thematic codes, particularly the ones found for the target market India and some of the key quotes from the interviewees matching these themes. In the following findings chapter, the opinions and viewpoints of both the internal employees,

external experts, and comparative company representatives are detailed under specific coded topics.

3.5. Limitations of Research Method and Ethical Considerations

The limitations and ethical concerns of this thesis research, relating specifically to the chosen methodology approach and to the case company, must be discussed. Hence, this section will detail the reliability and validity of the specific research.

The main limitation of the chosen research method is that it focuses on one specific case company. Although, the data collected is not solely obtained from LAKKA, the main focus is finding a potential market entry strategy for a MedTech start-up. The significant limitation in this case is the generalizability of the findings. As noted by Yin (2017), the single case approach decreases the ability for the findings to be generalized to other types of start-ups. Consequently, the lack of generalizability must be considered when providing conclusions from the collected data as well. The external interviews were utilized to provide data from different perspectives, increasing the credibility of the research. However, the data, particularly the possible sales and marketing channel strategies are limited to the theoretical research and empirical interviews of this thesis. Therefore, possible suggestions for future research could focus on the use of more comparative companies, an overall multiple-case study, or more analysis and perspectives from different stakeholders or companies.

Ethical concerns must also be taken into consideration throughout the entire research process (Eriksson & Kovalainen, 2008). Firstly, it must be mentioned that the research conducted as a case study for the organization is on commission. The organization is giving access to internal material and the employees for the research process. To ensure that all sensitive material is not misused, a contract is put in place with the organization. There are also ethical considerations that must be considered in relation to the data collection method chosen for this research study. Informed consent was collected from all participants and they were informed that the interviews were recorded. Furthermore, the interviewees were asked permission to utilize their names in the thesis and this was agreed upon before the interview. To decrease issues of reflexivity or bias, none of the questions asked in the interviews were

leading or biased in nature (Bell, Bryman, & Harley, 2018). And although the researcher is working closely with the company, the researcher is not an employee of the company nor owns shares of the start-up. Hence, the importance of objectivity was recognized during the entire research process. Explicitly, the researcher took the uncovered data at face value and did not have personal ties influence the findings of the explicit research. In the next chapter the results of data collection methods described in this section will be revealed.

4. FINDINGS

The previous chapter detailed the reasoning behind the chosen data collection methods and this chapter uncovers the findings from the secondary data sources and empirical interviews. Firstly, the empirical findings, the results from the empirical research are detailed. The findings are divided into sub-sections and discuss the main themes concluded from the interviews. The insights for the themes were gained from the interviews with the case company's internal employees as well as external expert opinions of the realm of India and SME internationalization strategies. An internal look into the current situation of the case company, LAKKA Health Oy, will be given through the semi-structured interviews conducted with the employees. Furthermore, the data and opinions from the external experts will provide information in regard to India and successful internationalizing Finnish SMEs.

The overall objectives of the empirical findings are to answer the research question and to utilize the information gained from the internal interviews to understand the current state of the company and their organizational capabilities. Specifically, in regard to how they influence the company's possibility of internationalizing. Furthermore, the expert interviews discuss essential information to understand market entry into the Indian market and answer the sub-questions. These include whether to enter the market with a certified medical device or consumer wellness product. Lastly, the interviews provide insights into potential sales and marketing channel strategies that have been successfully implemented by other SMEs. These strategies can potentially be utilized by medical technology start-ups such as LAKKA with their market entry to India.

Finally, the secondary data research of this thesis, thus the miniature competitive analysis is introduced. This purpose of this section is to understand the overall competitive nature of the industry, specifically highlighting the main competitors in the Indian diabetics' monitoring market. Furthermore, to detail the direct competitors of LAKKA's hypoglycemia detection wearable device, particularly understanding their main value propositions. The last aim of the secondary data is to support the empirical findings in answering the main research and sub-questions of the thesis.

4.1. Internal Understanding of LAKKA Health Oy

Discussions with key internal employees of LAKKA provided a clear understanding of the business model, motivations for internationalization, and the organizational capabilities. To first gain an understanding of the business model and value propositions of the company, the interviewees were asked about the brand elements and desired consumer perceptions. There was a consensus on the desired consumer brand perception to be the most trusted and innovative brand, as well as being number one in the markets and product segments in which they have presence in. The main value proposition for the start-up is to provide quality for the masses.

“Our value proposition with this product is that we bring the continuous diabetes monitoring to be accessible to everyone. With this product, a poor patient in a developing country can monitor their blood glucose levels continuously... From this they can improve their overall wellbeing and factually speaking increase their life expectancy.” (Sami Lakka, LAKKA Health CEO)

“We have written a mission statement and values but to summarize our vision is to create high quality monitoring devices for consumers with chronic diseases and with our products we will provide technology that will be a novel way to approach the problem.” (Sami Lakka, LAKKA Health CEO)

The two interviewees were in agreeance with recognized customer segments. Likewise, in their positioning in the market, specifically who their direct competitors were and how they perceived themselves better than their competitors and lastly their initial pricing strategy.

“Two market segments that we have discovered are small children, type 1 diabetics and small children usually have large swings up or down in blood glucose and these can happen several times a day which could be dangerous and these swings also happen at night. This is one important target market segment in all the countries. The next market segment is type 1 diabetics and hypo-sensitive type 2 diabetics. This is adults to young adults that at this time

monitor their blood glucose through pricking their finger and there is a large market share that do this.” (Sami Lakka, LAKKA Health CEO)

“CGM manufacturers such as Abbott are competitors to us, however their market segmentation is completely different from us. As they focus on developed countries and healthcare providers to sell their product to the rich. However, the main competitor to us is the self-monitoring devices in developing countries. This is the competitor product and there are several companies producing the needles and strips, and thus the substitute to our product...Our product can monitor the blood glucose while being noninvasive, this is the significant competitive advantage... Through our bandage we also get the ability to monitor the levels during the night when the patient is sleeping, which is not possible with the self-monitoring way.” (Sami Lakka, LAKKA Health CEO)

When asked about background and previous experiences, it was clear that the team had extensive work experience with backgrounds in Nokia, for example. There was a lack of previous experience bringing a business to an international market. The team’s Quality Manager had expertise in consulting start-ups, in terms of regulation and certificates, to internationalization, however not in the business sense. Consequently, they highlighted that the company lacked internal experience and expertise on internationalizing and needed external support to fill these gaps in knowledge.

“We lack the knowledge of the international markets in this industry, we need the support of the local markets and the analysis cannot be done by ourselves” (Heidi Peltolehto, LAKKA Health Quality Manager)

“I do not have any official experience with bringing a company to the global markets...We have an investor, who has sold his own company and it was a global company that was bought from another company. So, our investor has internationalization experience, but we will have to, in the future, recruit for this knowledge.” (Sami Lakka, LAKKA Health CEO)

Lastly, the interviewees reflected on the main internal capabilities that enable the company to internationalize. The main motivations for fast internationalization for the start-up were focused on their desires of an international brand and being ahead of competitors to make profit. However, funding was recognized as a bottleneck problem as well as the ability to gain quick visibility of their product.

“Our main internal capabilities are extensive experience in product development, particularly collaboration with international manufacturers and our ability to create an international product, so on the engineering level.”

(Heidi Peltolehto, LAKKA Health Quality Manager)

“Our second main internal capability [that makes us well equipped to internationalize] is our network in terms of partners in different countries, contacts that can help us find the correct contacts in a particular country or represent us in that country.” (Heidi Peltolehto, LAKKA Health Quality Manager)

4.2. Case of India

As the research specifically focuses on the Indian market, it is important to understand the motivations from LAKKA for wanting to enter this market initially, as well as the current situation with the potential distributor. The interviews with the consulting expert for market entries to India and Suunto’s Head of Asia provided significant understandings of the market.

It was mentioned by LAKKA that the motivations for market entry to a specific country involves several factors but mostly relate to the ease of entrance in terms of regulation and the size of the target market. The attractive number of diabetics in India, the limited access to continuous glucose monitoring, and the interested local partner were the main motivations for LAKKA in terms of India as a potential initial market.

“The user population size, the price sensitivity of the market, does the product find the correct target market segment in the country, how is diabetes as a disease in the country, how difficult is it to enter the country in terms of regulation, what kind of presence do we need in that country, do we need our own subsidiary or can we export our product to that country.” (Heidi Peltolehto, LAKKA Health Quality Manager)

In terms of the potential partnership, the terms were still fairly open and initial discussions in regard to potential partnership agreements were currently being discussed.

“We have not discussed much about the potential of our ‘HypoSense’ product, only that they could be there as a potential sales channel. This however is still open. We are still looking at that situation... The Indian distributor is one possibility. If we sell through the online store, we can get it running in India and have a local office there if needed. But how we gain the visibility, and whether the local Indian distributor can gain that visibility for us is still in the air.” (Sami Lakka, LAKKA Health CEO)

“Currently, the local Indian distributor has four billion sales annually and it is a manufacturing company, it can be compared to GM. To my understanding it is more of an OEM, where they do not have their own automotive brands but rather manufacture the product. They are expanding to medical devices, however currently they do not have any product portfolio. And do not have any visibility in the medical device industry.” (Sami Lakka, LAKKA Health CEO)

The interview with representatives from the Indian consulting company provided interesting findings in terms of what types of sales channel and marketing strategies should be utilized in the market and why. Firstly, the consultant provided insights on the healthcare market and the attractiveness. Specifically, noting that spending on healthcare is quite little in India and the insurance penetration is very low. It was also noted by Suunto’s Head of Asia that the Indian market is very price sensitive and is one of the important factors to consider with this market.

“India is the second leading country in terms of diabetes patients. The potential with your technology is significant. In terms of target segment, the age would be 40-59 as the target audience.” (Gaurav Singh, T&A Consulting Engagement Manager)

“India is one of the few countries in the world with the least spent on public spend on healthcare as a percentage of GDP with public. The public healthcare spending is less than two percent of the GDP and with private spending it is five percent.” (Tarun Gupta, T&A Consulting Managing Partner)

“Over 60 percent of the healthcare spent is out of pocket and the private healthcare insurance penetration rate is about 20 to 25 percent.” (Tarun Gupta, T&A Consulting Managing Partner)

“There is an increasing element of cost sensitivity because the insurance provider, the government is not footing the bill, rather you as an individual is footing the bill for up to two thirds of spending.” (Tarun Gupta, T&A Consulting Managing Partner)

“The other thing is that the pricing plays a key role...So for products which are not needs but wants there is an expectation for a discounted price even for a brand-new product... So what I am trying to say is even if you created awareness and you are selling at INR500, and your competition is selling at INR450, Indians will go and buy it from the competition if the products are similar.” (Sharmin Photographer, Suunto Head of Asia)

The consultant also determined the main delivery channels utilized in the market for MedTech products. Initially the two main platforms were the hospital pharmacies, in which the doctors directly advise the patient what to purchase. The other main platform, was the independent pharmacy shops which were a distribution challenge because there was roughly 850,000 of them scattered around the country. In the last few years, two new distribution channels have been introduced, which he determined to be more relevant in the case of LAKKA. Firstly, there are seven to eight large pharmacy chains with roughly 1,500 outlets.

He noted that these stores are in the correct demographic areas with people who have a higher ability to pay and are more aware of their health. The last distribution channel was noted as the one with the most potential, particularly in regard to connecting to potential customers.

“The most interesting new distribution chain is online pharmacy delivery chains, 3-4 chains in India. Their valuation and volumes have grown during this pandemic. 1mg, PharmEasy, NetMeds are platforms that sell health and wellness products. These online channels, health and wellness, retail chains and ecommerce platforms such as Amazon and Flipkart are new and growing.” (Tarun Gupta, T&A Consulting Managing Partner)

“The online channels are a good starting point to connect to the right audience. Now 100-150 million people are those who transact at least once a month on an online channel.” (Tarun Gupta, T&A Consulting Managing Partner)

The consultants were specific on the credentials they have when looking for partners for their client companies, when asked about potential local partnerships in India. They noted that there are several interested manufacturers in India wanting to work with these external companies, however it is important to not agree to the first one. Rather it is important to determine whether they have the reach and connections to the mentioned distribution channels, specifically the most relevant ones which are the large pharmacy chains and the online retail space. Suunto's Head of Asia also acknowledged that building a network in India comes with significant costs and governmental issues. Furthermore, Indian distribution companies are looking for long term partnerships.

“The local partner would absolutely need experience in the Health Tech/ Med tech industry and have products in which the sales force is already meeting medical practitioners.” (Tarun Gupta, T&A Consulting Managing Partner)

“While working a lot will depend on negotiation discussions, what is the right kind of partner, what support is needed, disruptive marketing, do they have the

reach to the doctors so that their product can be given to the doctors to test. It must be a multiprong approach.” (Tarun Gupta, T&A Consulting Managing Partner)

“And then also the government duty tax structure, the red tape authorities, and going through that aspect is challenging - so all importations are subject to high taxes, duties.” (Sharmin Photographer, Suunto Head of Asia)

“Most Indian distribution companies, or well-established trade companies who are willing to take on new brands, they look for long term partnerships. They don’t like short term partnerships, to allow for gestation to digest short term losses.” (Sharmin Photographer, Suunto Head of Asia)

The consultants also reflected on the diabetes demand and awareness in India, noting that although the problem is continuously growing, the awareness is currently low and both price and ease of use are the main critical factors to consider.

“At the moment only one fifth of the diabetics take their medicine so that is the shortfall. So not everyone who has diabetes will wear a monitoring device, there is an inertia, reluctance cost, so it will be a slow awareness.” (Tarun Gupta, T&A Consulting Managing Partner)

In the interviews, the consultants were asked about their opinions on potential sales channel and marketing strategies that LAKKA could utilize in the Indian market. Specifically, based on previous experiences, whether it would be possible for LAKKA to directly reach the consumer instead of going through the traditional route of getting the stamp of approval from the medical practitioners. The consultants noted that since their product is high involvement it cannot be marketed the same way as a thermostat. Therefore, in order to gain trustworthiness and credibility, LAKKA should target the medical practitioners and gain visibility through relationships with these healthcare players. They also noted that using patient experience stories from other countries can be beneficial but particularly the doctors in India are the main source of information trusted by the consumers. Additionally, they noted that a company’s own online retail store is an investment risk.

“Since this product [LAKKA hypoglycemia detection device] is not a straightforward wellness product, this is a high involvement product as you are putting a bandage on your body and changing it every day. You need confirmation from a medical practitioner that the product is safe, accurate, and needed.” (Tarun Gupta, T&A Consulting Managing Partner)

“The awareness for wearable devices such as these bandages is not very high amongst diabetics in India, it is low to moderate. Thus going directly to the customer is not the most viable solution but having a tie with a hospital that will give visibility because if top hospitals recommend diabetic patients to have this glucose monitoring device then it becomes easier for the product to penetrate in the market. It approves the awareness and scalability.” (Tarun Gupta, T&A Consulting Managing Partner)

“The doctor from the Indian ecosystems the more they talk about and recommend the product that brings credibility. Patient experience from other countries only reconfirms.” (Tarun Gupta, T&A Consulting Managing Partner)

In terms of marketing, the consultants, and the Head of Suunto Asia noted that marketing in India is very expensive compared to other Asian markets. The Head of Suunto Asia further suggests that companies that overinvest in the market tend to be more successful. Moreover, making the product available on several online retailers is not enough as the patients need to understand the product and whether it can be trusted, which should be a targeted approach to the medical practitioners and hospitals. They determined that a geographical approach could be logical, specifically focusing on certain Tier 1 cities and thus forming relations with the hospital chains in those regions. However, it is critical to identify the correct channels and platforms for social media marketing.

“To create the same level of buzz and awareness it costs a lot more in India than any other Asian market. Firstly, you are reaching a much wider audience, the Indian business community is not as giving and generous or as comfortable

trying out new things, unless there is a lot of contribution and support from the brand. It also needs a lot of customization and localization, typically what works in other countries will not be workable in India they might ask for some special solutions, special materials.” (Sharmin Photographer, Suunto Head of Asia)

“Garmin has been better at selling in India because they have deep investments in marketing and I would say they have spent more on marketing than any other market they would normally go into from an emerging market POV. So, I think a brand of that scale globally is much easier to get into India as a test market.” (Sharmin Photographer, Suunto Head of Asia)

“Identify 10 to 15 platforms and do the marketing. For doctors it is Practo. For health products it is Healthkart and the online pharmacy chains such as 1mg have their own marketing. This would come slightly later first it would be the practitioners and hospitals, and practitioners can be targeted on Practo but must be done in conjunction with the partner. Does the partner have the reach and team who is going out to hospitals?” (Tarun Gupta, T&A Consulting Managing Partner)

The key opinion leaders (KOLs) in India were determined to be celebrities, by Suunto’s Head of Asia. She further acknowledged that brands that go for celebrity KOLs have succeeded faster as people are fascinated with what these people are doing. However, due to Suunto’s limited resources, they have only been able to reach athletes whose awareness reach is limited to that community.

“Yes, we used influential marketing in the beginning of our expansion to the Southeast Asian markets, with the athletes...In India the only awareness you can create by having [normal athletes] kind of KOLS in India is within that community, to break the mould and if you want a more instant awareness you need celebrity athletes. It is a market where just having really good, authentic athletes is not enough. Firstly, we haven’t even had enough funds to have authentic athletes, forgot about celebrity athletes. But those brands that have

had resources to go for celebrity KOLs have succeeded faster. Simply because people want to know what is happening in celebrities' lives, what they are using and why they are using it. And the Indian celebrity status is so influential that just by hitting the right nerve you can get an instant recognition of millions of people it's kind of in that direction.” (Sharmin Photographer, Suunto Head of Asia)

Suunto's Head of Asia acknowledged that a company usually chooses one market to focus their investment into, specifically highlighting the riskiness of India and the need to be willing to accept losing money in the initial years. This was something that Suunto was not willing to do and thus they chose to invest into China. In his final thoughts, the consultant reflected on the aspects that are usually underestimated by companies interested in market entry to India.

“This is because China is a much more disciplined market and when Chinese people make a decision to do something, they actually go through it fast, efficiently, and with full dedication. It is also very expensive to do business in China but because the returns of investment are much faster people tend to make more money fast...Whereas in India the government structure causes barriers to entry ...If you are selling in China for 500 you would have to sell it in India for 1000...So typically the companies that succeed in India, are those that understand the risk and understand the gestation period and the reality of the price structure and duty structure. And willing to accept short term losses.” (Sharmin Photographer, Suunto Head of Asia)

“The company needs to have management depth as the Indian market is management and resource intensive, not a dip in and dip out. Number two can the product or solution achieve cost leadership in an extremely price sensitive market such as India. Third is financial if the product requires visibility India is an expensive market for brand promotion and creating brand visibility. Many times, these three aspects are underestimated.” (Tarun Gupta, T&A Consulting Managing Partner)

Overall, as the main research question is to understand a medical technology start-up's potential market entry into India, these interviews provided several useful insights. It is apparent that the growth of this chronic disease means that there is a high demand for new monitoring methods that MedTech start-ups could potentially provide, as well as easy access to several consumers via the online sales channels. However, the start-ups must be proactive and focus much of their demand push by increasing the awareness of diabetes and their product by directly targeting the medical practitioners. The reluctance and low penetration rate of diabetes in the Indian patients as well as the expensive marketing costs also means that it will be difficult to directly target consumers. As a result, they would need to lean on their potential local partners and their relations with these healthcare providers.

4.3. To Market as Medical Device versus Wellness Product

As LAKKA is currently in the technical feasibility stage of their product development, they are currently deciding on whether they should market the product as a medical device or wellness product. They noted several differences if the product were to be marketed as a wellness product directly targeting consumers, as well as the implications if marketed as a certified medical device.

“As we are in the feasibility stage of development another potential thing is to see whether healthy people could gain something from the monitoring of their glucose levels and thus potentially introduce the product as a wellness product, and thus the target group would be different.” (Heidi Peltolehto, LAKKA Health Quality Manager)

“We can get CE self-declaration for our product which means that as the manufacturer we give the product the CE mark. This means that certain safety requirements need to be filled but as a company we guarantee that they fill these requirements. However, if this explodes in the market, customers can sue that these did not fill the requirements. However, we do not need to produce data for an external certifier. Basically, the CE mark is always achieved.” (Sami Lakka, LAKKA Health CEO & Founder)

Furthermore, they reflected on the possible sales channels for a medical device and wellness product. Initially, LAKKA thought they could market the wellness product the same way to diabetics as a medical device but because the product has not been clinically proven, and thus does not follow the MDR guidelines they would be unable to directly target diabetics in their marketing strategies. Therefore, they cannot link the usage of their product for the monitoring of a specific chronic disease. Instead, they would have to market it as a product to monitor blood glucose levels but not specifically target diabetics.

“For the profiting off a medical device, the sales channel is very critical to where to go. So if our sales channel is through the internet, which can be highly realistic, with the wellness side it is very plausible to have our own online store, that can also be done if it is a medical device.” (Sami Lakka, LAKKA Health CEO & Founder)

The interview with the Healthtech Finland representative helped to understand what the potential collaborations could be if the product was marketed as a medical device and what would need to be considered if it was a consumer product.

“I see that collaboration with hospital districts is very important depending on the product of course. Particularly for a CE mark product, to my knowledge for example HUS has a program that takes in several start-ups and together they develop the products to fill the particular need in the hospital. However, such collaboration does not guarantee a fast-lane or free pass to market entry. Nevertheless, collaboration with bigger players is important.” (Sandra Liede, Healthtech Finland Legal Expert)

“In terms of consumer markets, it is important to understand the consumer behavior currently and this has changed due to digitalization, with the consumer we are trying to disrupt the healthcare industry. Soon we will not have the care aspect of healthcare, and just have health in which we offer different solutions for the consumer and they go with these solutions or their

questions to the healthcare professionals.” (Sandra Liede, Healthtech Finland Legal Expert)

The legal expert for Healthtech Finland later acknowledged accountability as an important theme that companies should showcase with their product, as well as how a certified medical device is a strength of the Healthtech industry’s accountability.

“I see that if you have a CE mark certified product it is part of the accountability theme as regulation is a part of the Healthtech industry’s accountability and it is strength to showcase. Of course, it is time and resource consuming, however it proves that the product works like it should and there have been clinical tests done and doctors’ can utilize them right away.”
(Sandra Liede, Healthtech Finland Legal Expert)

Based on her own experiences, Suunto’s Head of Asia also expressed the difficulties of educating the people in India if the product is a lifestyle one, as the medical communities are easy to pinpoint and through their recommendation, people will utilize the product. This is similar to how Suunto targeted the athlete communities and had them share and increase the brand awareness of their products.

“I had a technical product so I went to the local experts, sports athletes, who appreciated it and I didn’t go the lifestyle way because that would have been a huge battle to climb. Because who is going to educate the millions in the lifestyle aspect but in your case, this is my opinion, obviously but doing something for lifestyle cost a lot...So when you are launching something that is much more medical the communities that you are going to have to reach out. They are very easy to point out in the market, so you zoom straight to them and you use them to broadcast it out the hospitals to start recommending the product. Consumers prefer recommended products by professionals.”
(Sharmin Photographer, Suunto Head of Asia)

As a result, the question remains open for LAKKA which option in the long run will they benefit most from. Adhering to the medical device requirements means extensive resource

usage for the clinical tests, however it would allow them to directly target diabetics and target medical practitioners. On the other hand, marketing the device as a wellness product would increase the speed to market which would help them maintain a competitive advantage. However, they would have to re-segment their target markets and potentially be unable to obtain relationships with medical practitioners and hospitals. This is because they would lack the clinical proof required for relationships with the medical community.

4.4. Past and Present Sales Channel Strategies for SMEs

Discussions with the external companies focused on past and present sales channel strategies that aid in answering the main research question. Specifically, determining a potential market entry strategy for MedTech start-ups, like LAKKA with their hypoglycemia detection device. It is important to highlight again that these external companies are not additional case studies, and thus the key takeaway from these examples are the knowledge shared from the interviewees, not the information about how these companies internationalized.

Suunto internationalized to the Asian market in the 1990s initially with their scuba diving watch, forming partnerships with local scuba diving businesses, that at the time were mainly small kiosks. The Head of Suunto's Commercial Product Portfolio reflected that the company has focused on partnerships and local distributors when first expanding to a new market. The evolution of their sales channel strategies via the Chinese perspective was discussed. It was noted by the Suunto employee that this path was taken by the company because there were no online sales channel options available at that time. However, now their sales channel structure is completely different as there is more emphasis on online channels.

“We have grown with agents and local partners as the first initial steps of our market entries, particularly in Asia as it is such a broad market we had distributors and local partners who have invested into Suunto. And then selectively Suunto subsidiaries were also being added into the biggest Suunto markets in Asia as well, particularly after the acquisition of Suunto by

Amersports Corp. in early 2000.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“The evolution of sales channels is interesting to look at for example from the China market perspective. Roughly 20 years ago when we were expanding into China Suunto’s go-to-market strategy was to build shop-in-shops owned by Chinese partners in malls. The shop in shop concept was a big investment for both Suunto and for our Partners as it was similar to a franchise base but for Suunto this was a chance to expand in China as it would have been extremely costly for Suunto to build and own all these stores. All in all it was a big investment but we gained good presence and visibility from that and has helped us to growth in China.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“Now in the past 10 years the Chinese market growth has been driven through the online ecommerce websites such as JD.com, there are roughly two or three online traders that have a big market share and a big share of Suunto’s sales comes from selling to these JD.com type of dealers who sell with big volumes to consumers.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

In India, Suunto utilized a military specialist distributor by first selling only in the military environment and later expanding to the greater consumer market. Through this sale channel strategy, they gained the confidence and funds to expand their reach to the greater Tier 1 cities in India.

“We entered into a really niche market with the Indian military. We utilized the same military specialist distributor who recognized the potential of Suunto, and he wanted to do more and we increased his business case to test out the actual retail environment.” (Sharma Photographer, Suunto Head of Asia)

“The Indian military was the third largest in the world and getting a part of that business was very successful and very lucrative and we made a lot of

money in the first few years and once we got comfortable that we got some sales we started using the sales money to generate more marketing funds to then go into the actual urban cities like Mumbai, Delhi, and Bangladore which are the hot spots for anything that happens in India.” (Sharma Photographer, Suunto Head of Asia)

The current sales channel strategies were also discussed with Suunto, predominantly about the Asian market. The third player ecommerce sites play a dominant role in their sales, particularly in Asia. And it was noted that although having an own online store in Asia is important to manage the brand, the sales on the website are minimal compared to what is sold by the biggest local players in Asia.

“The role of brick and mortar is constantly decreasing. Even without the COVID-19 impact, the share of online sales has constantly grown to roughly 40 percent of our global sales both through Suunto’s own online stores and through our partners’ online sales, for example through JD.com in China and through Amazon globally. We expect the share of online sales to further grow.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“Suunto’s own website sales is nowadays an essential element of our market presence in each major target market, also when compared to the biggest online players in each local market. It is also important that a company has its own local web presence to build the brand locally. For Suunto the initial market expansion in Asia took place already prior the internet boom.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

Lastly, one of the Suunto employees acknowledged the challenging aspects of being present in the Asian market. The employee noted that the majority of their sales come through via the large online ecommerce players in Asia, highlighting the importance of being visible on these sites. Suunto’s Head of Asia particularly noted that the awareness points on the sites correlate to the amount of investment and sales. Accordingly, Suunto wants to maintain these relationships even with limited resources.

“Partnering with these big online players, is a big opportunity for us as we are a smaller company with limited resources compared to many of our rivals such as Garmin, Fitbit, Samsung and Apple. As many big brands are entering the market with their smartwatch offerings it puts our authentic sports brand story into a true test. We aim to stay relevant for our Target consumers and trade partners alike through our brand authenticity in outdoor sports and related up to date offerings.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“So, we are selling on Amazon India currently we also sold on Flipkart, Myntra and I think that from an awareness stand point it all relates to how much you invest into it. The platform is there, the more you invest the more you earn the awareness points... But the amount of time they give you or the amount of free marketing they corporate with you, really depends on how big your sales are. It is very difficult for a small brand to be a part of Amazon.” (Sharmin Photographer, Suunto Head of Asia)

SELKA Oy has more recently started internationalizing and has had access to the online sales channel sources. They acknowledged a recent switch from mainly B2B sales to focus on B2C, due to the ability to maintain a fast delivery time and turnover rate through a small warehouse filled with their tables. The CEO expressed their strategic change from decreasing focus on the domestic market to an emphasis of selling directly to customers in the international markets.

“Our sales distribution channel strategy in the domestic market has been to use distributors and in international markets we aim at selling directly to the consumers. However, through exporting we have realized that it is good to have local agents who in their work directly look for B2B customers because we can also sell our products to other organizations. And thus, we are also bringing distributors to these markets, initially having distributors handling different things, such as logistics.” (Juha Nevalainen, SELKA CEO)

It became noticeable in the interview with the CEO of SELKA that they took an opposing approach to their sales channel strategies in the international markets, compared to Suunto. Instead of utilizing local partners or third-party online retailers, they focused on a trial and error strategy and have sold through their own website in the international markets they are present in.

“We have an unorthodox way to approach new markets. For example, one consultant came to talk to us about how to enter the German market. His message was, it would be a waste of time to enter the German market without having at least a three month, locally performed market study, to understand the consumers’ behaviors. Instead we opened webstore to be available for that market, did marketing campaign and if there were orders coming in, we decided that we have a product, which is wanted in that market. We have followed our “run and learn” strategy in our webstore development and this has worked for us. Of course, one should note that we are a small company, just about 2 million eur this first financial year. So what works for us, might not be suitable for a larger company. However, we are continuously growing, and our market entries have been fairly successful.” (Juha Nevalainen, SELKA CEO)

“We only have our own ecommerce store and cannot be found on any other ecommerce site. We see that as a small company being part of a bigger ecommerce retailer that has 10,000 of other products, your product will not be visible. And thus, only having our own website has worked for us. However if we add resellers, they can sell our product on their own websites.” (Juha Nevalainen, SELKA CEO)

The CEO further noted that the requirements of being visible on a bigger retailer is extensive and it is important to outweigh the options and determine whether the resources can be utilized more efficiently and effectively, such as advertising. He also acknowledged the expenses related to operating one’s own ecommerce and the fact that fixed operation costs need to be considered.

“We have thought about joining Amazon and might try it one day. We have also thought of joining other design store retailers. In such case we need to carefully think what is the benefit of the partner. Whether by investing same money as giving to the reseller, we could create more revenue in our own webstore or if the retailer would open markets where it would be challenging for us to enter by ourselves.” (Juha Nevalainen, SELKA CEO)

“Operating a webstore of your own is not exactly simple. There is no ready store, where you just place your products. We are now using Shopify platform. On top of that we have separate applications for logistics, billing, translations, reviews, backup etc. Each of these require own license, which means additional cost.” (Juha Nevalainen, SELKA CEO)

Overall, these interviews uncovered the current dominant role online sales channel strategies have with companies focused on international markets. However, opposing themes amongst the two comparative companies were also discovered. Specifically, Suunto, a company with a more significant international brand has internationalized through the use of local partners and relationships with third-party retailers. Hence, a significant proportion of their online sales come directly from third-party retailers in Asia compared to their own ecommerce site. Whereas SELKA has focused on a test market entry strategy mainly through direct exporting to customers from their own ecommerce site. They only utilize local distributors or partners in expensive markets with high duty costs or to gain access to B2B customers in that market.

4.5. Gaining Visibility Through Market Entry and Marketing Strategies

The main research question for this thesis is to try and understand how a medical technology start-up can gain visibility and sales for their product, therefore external case examples were examined to find possible suggestions. The interviews with two Finnish companies, one with a developed international brand and one with a fast-growing market presence and internationalization strategy, provided potential best practices for a MedTech start-up, such as LAKKA. Specifically, the interviewees discussed their internationalization approaches and how they created visibility for their product. From the interviews it became clear of a

shared theme between the companies. They both used a similar approach of niche market targeting in their internationalization efforts to create the awareness for their product.

As previously mentioned, Suunto entered the Asian market in the 1990s with their scuba diving watch to directly target the scuba diving unions and overall community. The expansion into the market was a step by step process with an initial product and niche target segment. They noted other competitors in the industry when they entered however, they were able to gain most of the market share due to their innovative product. The Head of Suunto's Commercial Product Portfolio remarked that the market entry was based on the functionality of the product rather than its external appeal. However, once customer loyalty was formed from the scuba diving community, the innovation continued and made the watches more lifestyle appropriate.

"The way Suunto gained visibility in Asia, particularly in the beginning of our expansion to Asia, was built on our strong presence in the scuba diving market, and it also greatly helped Suunto in the beginning with our expansion to Asia and even today the presence is still very important and Suunto is particularly visible in the vacation hot spots." (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

"Suunto's global brand presence over the past 30 years has been built on the success in Dive market and from there the Brand and our offering has expanded to the outdoors, then to endurance sports and fitness watch markets. The go-to-market strategy for Suunto with our scuba diving watches in the Asian market was through the scuba diving community." (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

"There were competitors in the scuba diving watch market when we first entered the Asia market, but pretty quickly Suunto was able to get a big share of the market and be known as an innovative brand in the dive scene." (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“In the beginning our brand awareness in Asia was built on innovative and reliable dive products. Then the watch like size and form with everyday wearable dive watch offerings became very successful. The wrist watch dive offering became very popular as people were able to utilize the watch beyond the scuba diving as an everyday watch. It became a crucial self-branding element for the scuba diver to have our watch on.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

Suunto’s Head of Asia discussed their particular market entry strategy into the Indian market, following the same niche market pattern as in China. Specifically, choosing a non-mainstream route due to the lack of awareness in regard to their product and the high expenses.

“In 2008-2009 we entered the Indian market and we have not had as much success in the Indian market as we have had in the other markets...When we first entered [the Indian market] we actually went a whole different route we did not go the mainstream route because it is very expensive to enter that way and no distributor was even existing who understand the sports tech products as much as they understood a tennis racket or golf ball. So we started working with a distributor who was a military specialist, Suunto was an extremely recognized brand within the military of India.” (Suunto Head of Asia, Sharmin Photographer)

Suunto also noted the cultural change that occurred in the Asia market, most notably through the introduction of wellness sport watch products to the market. It could be seen that first the demand and awareness of sports watches needed to be built. This was initially done through the targeting of the niche scuba diving community and then focusing on providing lifestyle watches that looked like normal watches. However, due to the cultural shift from the introduction of these sport watch companies and westernized viewpoints, their target segment in Asia expanded as well as their offering.

“The success of Suunto brand and offering has been built on these same principles when expanding from dive to outdoor ABC watches and then to GPS

Sports watches: innovative, relevant and reliable measurements combined with appealing watch-like designs and materials to inspire the use of our watches in sports action and as an everyday watch.” In Asia there has been a gradual but consistent change in cultural climate and related consumer behavior over the past decades towards social acceptance of sweating and practicing of endurance sports.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

A change in the marketing channel strategies employed by Suunto was also acknowledged in the interviews. They noted that traditional marketing campaigns such as presence in events and the usage of spokespersons creates a community of appreciation towards their brand, which is utilized to spread word-of-mouth. Currently, their main focus is telling the story of Suunto through their ecommerce website and working together with the third-party retailers to have promotional campaigns.

“Eight to thirteen years ago in most markets one third of our marketing budget went to being present at events, sponsoring e.g. dive, outdoor and endurance sports communities, events and people. We searched for visible athletic figures both globally and locally through which we could influence a greater population of people. This was the main strategic approach. And through that we were present in adventure events, and we also sponsored International Triathlon Union organization and utilized athletes as our ambassadors and that’s where a lot of our marketing budget went. But in the past ten years, the primary focus has been on digital marketing and being relevantly present globally and locally in the digital space.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“The way we do it generally, whether its India or any market, when we sign up a few of these athletes we give them products and they become like our testers and then start learning the product inside out and then they start loving it and then they start advocating it... You have to attack the communities or the associations where there is already an existing group of likeminded people who will give benefits for your product...And then word-of-mouth spreads. So,

word-of-mouth is a really big way of starting the acceptance of the product and the passion of the product. And then to take it to the business side of things then it's just pure point of sales and online platforms... Competition plays a really big part as a juncture when you do not have money to do a lot of it yourself, you find out whether there is a similar product or brand that is existing in the country and they are the ones who open the market for you, with the awareness that they are spending on and then you take a share of the sales as the customer is already educated... The actual awareness creation is happening through marketplace because that's where the traffic exists.”
(Sharma Photographer, Suunto Head of Asia)

“Of course, the ambassador marketing has not completely been eliminated, for example now looking at our Fall 2020 outdoor campaign, it has been built on sharing the stories of our own sporty employees, trail runners, hiking enthusiasts and bouldering geeks and through them we tell the story that Suunto has gathered this sporting knowledge and expertise and we utilize the digital space to tell this story.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

“In terms of being visible on major ecommerce websites, these big online players are key accounts for Suunto and their role has grown significantly. And thus, through interactions with them we agree on campaigns together, such as value and price promotion campaigns or if we have a new product launch, they typically are very interested and want to work together in launch campaigns. Let's just say that we aim to make a good use of the growing presence of online retailers, but of course managing actively our own web-presence in these markets is equally important.” (Sami Arhomaa, Suunto Head of Commercial Product Portfolio)

In their more recent internationalization, SELKA Oy has followed a similar niche market entry strategy by targeting urbanized cities rather than trying to target entire countries. The CEO noted that several different target groups were tested out to determine whether there is

a particular age group or educational background that would be the most interested in their product and targeted their social marketing there.

“After testing the products in Finnish market, we decided to go strongly abroad. We could not find other similar products in the market, so we had to test, how we can get visibility. Our plan was to sell directly to consumers, rather than finding local partners and resellers. The first marketing tool was Facebook. Now we are using also Google, Instagram, Linkedin and Youtube. We understood that if our market area is Europe, we cannot achieve anything with just a 10 euro per day marketing budget. As we did not have thousands of euro budget, we decided to go-to-market city by city, rather than country by country. As first test cities we chose Amsterdam, Brussels, Stockholm and few cities from Germany.” (Juha Nevalainen, SELKA CEO)

The CEO mentioned that because of the new product type, similar to that of LAKKA, they had to create the words for how consumers would search and find their product on Google. He also reflected on how they have implemented their marketing strategies and the current specific types of social media marketing tools being used by them.

“Google search engine optimization is far more than just paying advertisement for words that people use in the searches. We have done detailed analyses about terminology used both by competitors and consumers. This keyword analysis is in important role in all our published content; webstore product descriptions, articles, blogs etc. As result of this Google gives us very high quality rating and our marketing cost is going down.” (Juha Nevalainen, SELKA CEO)

“Our marketing budget has grown significantly as we have expanded to new markets. In total we spend about 1000 euros per day on digital marketing.” (Juha Nevalainen, SELKA CEO)

The CEO specifically acknowledged different types of social media marketing strategies they have utilized in the past. The company noticed that influential marketing, giving away

a few tables for free to certain influencers, did not provide them with noticeable benefits. He Later reflected that perhaps the influencers were not popular enough or they did not understand how to realize the potential. Furthermore, they do not utilize data analytic tools to track their specific Facebook posts, as they see that no one tool shows all the outcomes of one's efforts. Rather a person must be interested in the analytics to see whether they work and what needs to be changed.

“The marketing is not always about getting sales. As you enter new market or introduce a new product you might need to train the AI engine to be able to find the correct audience. Sometimes we used these traffic campaigns, just to generate more webstore visits. Sometimes we paid to Facebook, just to get 5000 visitors per day from selected target audience/area just to see if this group works similarly to people in another area. The purpose of this is to understand what kind of marketing activities works for people in this area. One important thing to understand is that we do not want to show content to people who are not interested about it. This will create negative comments in posts and does not create revenue. Also Facebook and Google want to show only content that their users are interested in. “(Juha Nevalainen, SELKA CEO)

“We have also used some more traditional marketing, prints with digital newspaper here in Finland. Outside of Finland we have used only digital marketing. Due to COVID-19 all exhibitions were cancelled, so we could participate on these.” (Juha Nevalainen, SELKA CEO)

SELKA was an unknown brand in the beginning, and thus they first needed to create demand for their product to gain the initial customers. Later, trust for their product later acquired through the use of customers reviews which were present on their online store.

“We are a small unknown brand from middle of nowhere in Finland. If a new brand is entering market, you need to carefully think, why would a consumer purchase your product. If the product costs 600 to 900 euros, the consumer must have trust in this company and product to purchase if from webstore. We understood that the trust is the key factor indecision making. This we built

using articles about the company and the story of the new beginning of SELKA. We encouraged first buyers to write reviews. It was important for us to receive reviews from abroad to show that we have customers from all over the Europe. Currently we have only 4 and 5 star reviews in both our webstore and Facebook.” (Juha Nevalainen, SELKA CEO)

Lastly, the CEO gave tips on how to run an online website, particularly acknowledging that actively reaching out to the customer is crucial. Furthermore, the CEO discussed the main issues that need to be considered with marketing strategies.

“Another important thing when running an online website is that if you receive a message from a customer you must answer back on the same day. You have to be continuously active and follow the chat, Facebook messages, as well as emails and aim to answer the customer on the same day. This means someone must be extremely active in the online store, specifically in the beginning to ensure that everyone has a positive view of the company. Mistakes will happen and these should not be hidden, rather accepted and fixed, the quicker the better.” (Juha Nevalainen, Selka CEO)

“In terms of the marketing strategies that work and do not work, it is pointless to do a comprehensive countrywide marketing strategy, you would need to place a lot of resources if you want to reach the entire market and thus you should start with regional marketing and target markets. And you must learn how these target markets react and this then can be copied to several different regions... It is very important to understand and know the target customer group well. Content creation is very important, and it should be decided whether the content creation is an internal process or whether it should be outsourced. We have an outsourced partner who does our content creation, and this is not cheap either. And once you make an online store, the building of the platform is one cost, however there are several daily operational costs. And thus, the costs add up. For example, we have a partner that continuously develops and maintains our website, we have the content creation partner, as

well as the applications and marketing which means we can easily spend tens of thousands of euros a month.” (Juha Nevalainen, Selka CEO)

The overarching theme that was found from the interviews with the two comparative companies was the use of initial niche target segmenting to create the demand for the product. Furthermore, trust in the product comes from the operational capabilities of the product as well as customer reviews. In addition, digital marketing strategies are important in order to stay relevant and create brand awareness for one's product.

4.6. Secondary Research on Potential Competitors

The results of the secondary research also provide interesting insights for this thesis. Particularly, the findings include the competitive landscape of the diabetes monitoring market in India as well as the direct competitors to LAKKA's technology. These findings aid in understanding the current position of LAKKA in the market and its value proposition compared to the other new players in the diabetes monitoring market. And finally, these findings highlight the impact to the potential market entry to India, which is the main research question.

The diabetes devices ecosystem in India is divided into two markets, the self-monitoring of blood glucose (SMBG) and the continuous glucose monitoring (CGM) market. Currently, the self-monitoring segment has the greater market capacity with several different players holding market share within the industry. Awareness of self-monitoring is continuously increasing in the country (Mordor Intelligence, 2020). At this time, only a few major players hold the market share of the CGM market in India, including Medtronic and Abbott. While the present SMBG market has several domestic and international players (ibid). Abbott India Limited has a variety of different diabetes care devices both for personal and hospital use. The multinational medical device and healthcare company has also partnered with India's largest online pharmacy and healthcare platform, 1mg, to bring their CGM products online to increase both accessibility and ease of usage (Business Wire India, 2020).

The blood glucose monitoring market is growing with several new entrants providing innovative ways and uses of technology to monitor blood glucose continuously, both for medical and wellness purposes. More specifically, one current competitor for LAKKA, particularly in the wellness blood glucose monitoring market, is Finnish B2C start-up Veri Oy. They are currently in the go-to-market stage with their mobile application used in conjunction with an off-the shelf CGM. Their mobile application provides useful information, to help people understand how their lifestyle habits influence their metabolic health (Veri, 2020). The mobile application is explicitly focused on everyday people tracking and steadying their blood glucose levels to increase athletic performance and sleep quality. Additionally, highlighting that their main value proposition is to bring their technology to a greater target market who are interested in improving their metabolic health (ibid).

Another direct competitor to LAKKA's current hypoglycemia detection wearable device is Finnish start-up GlucoModicum Oy. Their current focus is on creating needle-free health products, with the main emphasis on developing non-invasive glucose monitoring devices (GlucoModicum, 2020). The patented technology utilizes a different method of measuring the blood glucose levels compared to LAKKA, however the overall premise of non-invasive is similar to that of LAKKA (ibid). Additionally, due to the inexpensive manufacturing costs they are also focused on mass production with affordable prices. Furthermore, they are currently in the developmental stage as well, but have already started their clinical tests successfully. They were awarded the CE mark for their first in-market product in the beginning of July 2020. Their goal is to be available in the market in roughly two to three years.

Overall, this rough competitor analysis on the Indian environment and potential direct competitors for LAKKA highlight the attractiveness of the blood glucose monitoring device industry in terms of market growth. However, this also reveals the interest from both major MedTech players and start-ups who are tapping into this demand potential, both in the realm of wellness and medical device industries. Consequently, this stresses the competitive nature of the market. Nevertheless, as awareness of non-invasive solutions and metabolic health monitoring for normal citizens increases this in turn creates a market for the solutions that LAKKA is providing. This is because there is room for multiple players to share the market and consumers.

4.7. Summary of Findings

This findings chapter aided in forming answers for the research questions of this thesis. Firstly, overarching themes were determined from the analysis of the interviews. For the main research question, the empirical findings highlight important considerations of the Indian market that must be recognized. These include the need to directly target medical practitioners, due to the low awareness of diabetes in India and the local partner's aid in being visible on the main MedTech ecommerce sites. The secondary data research emphasizes the market growth of the blood glucose monitoring device industry in India, and consequently the competitive nature of the market. The market is currently controlled by major MedTech players. The findings from the comparative companies, found the overarching themes of initial niche target segment marketing. However, there were opposing views on whether to focus on third-player retailers or one's own online retailer. In relation to the sub-questions, the empirical findings show support in marketing the product as a medical device because it allows for possible collaborations with healthcare districts and the credibility to show the medical practitioners that the product in fact works. The secondary data also found other start-ups developing their own version of non-invasive blood glucose monitoring wearable devices, which creates a market for this type of monitoring and potentially indirect brand awareness for LAKKA.

In the following section, the empirical data found from the secondary sources and interviews will be extensively analyzed and compared with the theoretical research. Specifically, in regard to the conceptual framework, to discover essential linkages and provide possible recommendations for medical technology start-ups.

5. DISCUSSION

The findings from both the secondary data research and empirical interviews have several correlations to the academic literature explored for this thesis. Analyzing the findings alongside the previous literature provides a proper understanding into a potential market entry strategy for a medical technology start-up with their hypoglycemia detection wearable device to the Indian market. Particularly, the connections between the research on international entrepreneurship in regard to sales and marketing channel strategies and the findings from the empirical study. The conceptual framework illustrating a potential MedTech start-up market entry into the Indian market can be specifically applied to the case of LAKKA to conclude whether India is a plausible market entry option for the start-up. In addition, the research sub-questions focusing on the wellness versus medical device industry influence on visibility and potential brand awareness will also be reflected upon and answered.

5.1. LAKKA Health Oy Internal Capabilities

As the main question in regard to this thesis focuses on a potential market entry strategy for a MedTech start-up, it is essential to understand the internal capabilities and challenges of the case company that affect the plausibility of this internationalization. The findings of the internal interviewees with the LAKKA employees concluded several capabilities and obstacles that need to be addressed to determine their influence on the market entry strategy. Firstly, literature has found that start-ups in the medical industry begin from the founder's higher education and usually result as a response to certain issues experienced in the real world (Livi & Jeannerat, 2015). LAKKA's founder Sami Lakka noted that the idea and interest in the medical technology industry sprung from his post doctorate experience in the United States.

Academic research has determined that the strategic process of start-ups towards success differs from traditional companies as geography influences the decisions of start-up management (Onetti et al., 2012). As a result, the business model canvas became a popular method of visually displaying the start-up strategy, modernizing the business model by

focusing more on agility, the demand of end customers, and the impact of geography (Shahand, van Duffelen, & Olabarriaga, 2015). LAKKA has utilized the canvas framework to layout their strategy. In their interpretation of the BMC they strongly emphasized their value proposition, as it expresses the competitive advantage of the company (Shahand, van Duffelen, & Olabarriaga, 2015; Carvalho, Galina, & Sánchez-Hernández, 2019). They have determined that their products bring continuous diabetes monitoring accessibility to everyone and thus quality for the masses.

Start-ups are also referred to as born globals, as they view international market expansion as a natural step in their process and usually have very limited experience in their domestic market before venturing outward (Cahen, 2019). Start-ups, in high technology industries, are driven to internationalize for several external reasons including international social capital and size of the domestic market (ibid). LAKKA expressed their motivation to expand to other countries quickly once they enter the market because of the small domestic market that Finland is, as well as their access to a huge network of potential partners. Research has acknowledged that start-ups can speed up the process if they focus on consumer demanded innovative solutions, creation of opportunities, and quality assurance (Mort, Weerawardena, & Liesch, 2012). LAKKA acknowledged that they want to create an international brand and specifically with this hypoglycemia detection device they can provide diabetics the ability to monitor their blood glucose continuously and affordably, thus meeting the demands of the consumers.

Research has also determined internal capabilities that impact the desire of start-ups to go abroad. These include innovative abilities and the entrepreneurial market knowledge (Urban & Sefalafala, 2015). However, new ventures in the medical technology do not rely on the past experiences of the entrepreneur within the industry (Livi & Jeannerat, 2015). Past research has also found that particularly Finnish eHealth start-ups lack the necessary business skills while having a holistic understanding of the technical side (Saarela et al., 2018). This idea was also found with LAKKA, as although the employees had extensive experience working in the technology industry, it was seemingly noticeable that they had limited experience in bringing a product or service to an international market, in terms of the business side. Academic research on international entrepreneurship has further determined that managers of start-ups who have previous international experience greatly impact the

desire, degree, and success of the internationalization (Javalgi & Todd, 2011; Urban & Sefalafala, 2015). Consequently, an essential issue, that LAKKA themselves raised, was the need to rely on finding external support from either local partners or through recruitment to fill their knowledge gaps.

Overall, the synergies between the findings from the literature and LAKKA acknowledge that the internal capabilities and issues influence the potential for internationalization. Specifically, LAKKA has a clear grasp of their value proposition. In the future, continuous open communication and collaboration amongst the start-up in regard to the strategic outlook will ensure a clear implementation plan and understanding of the end goal. Furthermore, both previous literature and LAKKA agree that prior internationalization experience is a significant knowledge benefit for the MedTech start-up to have. Therefore, finding assistance from external networks or recruitment will increase a medical technology start-up's speed, degree, and performance of future international market entries while efficiently utilizing their limited resources.

5.2. Market Entry Plausibility of the Indian Market

This thesis specifically focuses on a MedTech's market entry into the Indian market and whether it is a possible first option for this type of start-up. External research on India concluded it to be a highly complex market with opportunities and potential obstacles that highlight whether the demand of the market is enough of a sales opportunity for start-ups like LAKKA. The literature in regard to the influence of the external business environment has contradictory results. Studies conducted in emerging economies concluded that the internal factors and capabilities of the start-up had more impact on the performance of the internationalization compared to the company's society and overall environment (Javalgi & Todd, 2011; Urban & Sefalafala, 2015). Analysis on the medical device start-up ecosystem, on the other hand, found that this industry had several influential stakeholders including the government, hospital, policymakers, and patients (Lee, Park, & Lee, 2019). This means that to successfully enter a market, the start-up must have an effective procedure to manage all stakeholders during the market entry (ibid).

Accordingly, as this thesis focused on a MedTech start-up, the external business environment influences the success of the internationalization. And therefore, the findings of the Indian market must be compared to determine what needs to be considered with the market entry (Lee, Park, & Lee, 2019). LAKKA noted that they were motivated to enter the Indian market because of the high number of diabetics, limited accessibility to CGM, and an interested local partner. The literature supported this perception as the Indian market has roughly 65 million diabetics with several underserved areas (IMARC Group, 2019; Verma, 2018). Furthermore, the government initiatives are pushing for frugal innovation, low-cost medical devices, with focus on domestic manufacturing because currently over 70 percent of all medical devices are being imported (Dang & Sharma, 2019; SKP Group, 2017). And since the government is placing higher duties on imported finished goods, LAKKA should utilize this to their advantage and emphasize a move of their manufacturing to India with their local partner, to save on costs (SKP Group, 2017).

The interviews with the external consultants and Suunto's Head of Asia concluded that as two-thirds of healthcare costs are paid by the individual, cost sensitivity is extremely high in the country. This fits the cost leadership strategy that LAKKA is striving for; however, they must also consider further discounting their prices as this is expected by the Indian consumer. The T&A consulting firm acknowledged the high demand for diabetes monitoring devices makes India a potential market opportunity. However, the current awareness is very low with only one fifth of diabetics taking their medicine, thus a monitoring device is seen as a high involvement product. Both Suunto's Head of Asia and the consultants of T&A expressed that marketing is very expensive compared to other countries due to huge market and reluctance from the business environment. This specifically highlights the concept that companies who overinvest in marketing succeed in India. Moreover, this means that the lack of education and awareness in regard to diabetes, is a significant obstacle for MedTech start-ups wanting to enter. However, due to funding being a bottleneck problem for start-ups and having limited resources, MedTech start-ups do not have the option of overinvesting in the market and must utilize other strategies to increase their visibility in India. Specifically, these issues influence how medical technology start-ups should enter, either as a wellness product or medical device.

5.3. To Enter as Wellness Product versus Medical Device

The introduction of the digitalized medical industry, eHealth, has created start-ups focusing on consumer centric products to increase the ability of remote monitoring and improved patient care (Meier, Fitzgerald, & Smith, 2013; Geissbühler, 2012). LAKKA's wearable hypoglycemia device is under the realm of eHealth. However, one of the main debates within the start-up and a sub research question for this thesis is the decision of entering the market as a certified medical device versus a wellness product. The sub-question for this thesis research is to understand the effects of a MedTech start-up's go-to-market strategy as a certified medical device versus wellness product on their capability to gain visibility and optimal sales in India. This was particularly analyzed under the lenses of the case start-up, LAKKA. Internally, the LAKKA employees recognize that the timeline to the market would decrease if they entered the market as a wellness product because they would not have to complete the extensive clinical tests to receive the medically certified label. Furthermore, the medical device route requires an extensive usage of resources, which are currently limited for the start-up. However, LAKKA also acknowledges that if they would enter as a medical device, they would achieve the credibility and trust for their product before their initial market entry. This would allow them to work alongside the hospital and medical practitioners to market their product.

As the MedTech or eHealth industry is fairly novel, particularly in terms of wearables, there has been limited research in regard to how marketing the product medically or as a wellness product impacts the company's ability to gain visibility for their product. LAKKA noted that their focus was on providing a consumer centric product and the opportunity of continuous blood glucose monitoring. The academic literature determined the use of partnership networks with emphasis on collaboration amongst the specific ecosystem and with public funding sources as essential influences on potential start-up survival (Muhos et al., 2019; Rank, 2014; Saarela et al., 2018). Muhos et al. (2019) and Saarela et al. (2018) further acknowledged that start-ups must scale up their trials with rapid succession for quick market entry as imitators are highly plausible. Network usage was also recognized by Healthtech Finland who noted the importance of the accountability theme within the Healthtech industry and the benefit of collaboration with healthcare districts. It was further highlighted that having a medically certified product showcases that the product works and

can be trusted, thus a strength of the accountability theme for the Healthtech industry. Hence, focusing on achieving the medical device certification approval appears to provide significant benefits for a MedTech start-up. As the start-up could consider partnering with the Finnish healthcare districts to develop the products, to meet the specific consumer demands, as well as utilize the resources from these public sources.

The previous literature also acknowledged the difficulty of commercialization and support from the opinion leaders, therefore MedTech start-ups can use their innovative products as a marketing tool to be purchased by larger MNEs (Livi & Jeannerat, 2015). The interviewees expressed the difficulty of reaching the medical practitioners without support from the local partners who must have these network connections. Hence, if the MedTech start-up is unable to find a partner with these essential connections, they could consider selling or franchising their technology to a larger MNE. In particular, they could sell to a wellness wearable MNE that is interested in the effects of blood glucose levels on sports performance. The blood glucose monitoring trend in the wellness market is becoming more popular. And as noted in the competitor analysis, start-ups, such as Veri, are beginning to create the market and demand of measuring metabolic health through blood glucose. In the coming years, more companies both start-ups and well-established wellness wearable SMEs and MNEs will develop their own approach and measuring tool. Precisely, incorporating the measurement of blood glucose to their new devices, to determine metabolic health and sports performance. This in turn creates a demand and market for products like the one LAKKA is providing, meaning it can sell its technical capabilities to a bigger player or enter the market with its own wellness version.

However, as this thesis is exclusively focused on the Indian market, it is essential to also acknowledge the implications of the Indian consumer perceptions on this go-to-market debate. Lee, Park, and Lee (2019) ascertained that prior to market entry, start-ups must consider the history of consumer purchases within that market and comprehend the existing willingness to purchase the current products offered within the target market. The secondary online research of the Indian market, showcased through the PESTEL framework, determined that only a few major players control the market share of the CGM market in India, mainly Medtronic and Abbott (Mordor Intelligence, 2020). And Abbott's CGM medically certified products are widely accessible online. In the interviews, it was agreed

that Indian consumers have low awareness of diabetes and rely on the word of medical practitioners. Explicitly trusting the products that the medical industry promotes. Based on their expert opinion, the Indian consulting company and Suunto's Head of Asia expressed the need to directly target the medical practitioners rather than direct consumers with LAKKA's hypoglycemia detection device. The analysis of the Indian market concludes that lack of education has resulted in little awareness of the harmful effects of diabetes and an unhealthy lifestyle, which in turn results in limited knowledge of how to monitor and care for the disease.

Consequently, this means that India is far behind the trend of metabolic health measurement through blood glucose. And therefore, if a MedTech start-up, like LAKKA, would introduce their product through the wellness product lens, it would be extremely difficult and costly to push to consumers and evidently fall on deaf ears. This is because the amount of resources and years of lost profit to create the demand of a wellness wearable in India, known for high marketing costs and low awareness levels, would not be possible within the boundaries of a start-up's limited resources. It can be concluded that the extensive marketing costs to create awareness, the high involvement aspect of the product, and low consciousness lean towards the need for the medical device certificate approach in India. This market entry strategy would increase the likelihood of the product's visibility and Indian consumers' willingness to try the product.

Nonetheless, the research on born global start-ups have recognized the inability to generalize findings to a large scale of start-ups (Saarela et al., 2018, Muhos et al., 2019). For that reason, and based on the academic and empirical findings, it can be suggested that a MedTech start-up enter the Indian market with a certified medical device product. This is due to fact that the business and consumer environment of India are more willing to accept an export that has the medical practitioners' stamp of approval. However, it is important to acknowledge that entering through the medical device route may not economically be the most efficient or feasible route. This is because it involves extensive clinical tests that are both costly and time consuming, therefore this also needs to be considered with this option. Additionally, it must be noted that entering with the medical route is only the case for India, as the feasibility of the wellness market for blood glucose monitoring is continuously growing and a market that can be tapped into and potentially exploited by a MedTech start-up. The internal

capabilities and market entry approach have been debated; however, a final discussion of the sales and marketing channel strategies is required. This final analysis will also answer the main research question of a MedTech start-up's ability to achieve optimal visibility and sales potential.

5.4. Sales and Marketing Channel Strategies for Visibility Maximization

The aim of this thesis research was to determine a market entry strategy for a medical technology start-up to the Indian market, distinctively looking at the sales and marketing channel strategies to optimize the visibility of their product. The empirical research specifically focused on LAKKA, in order to find similarities and differences that can be potentially be generalized to the broader realm of medical technology start-ups. The academic literature in regard to born global sales channel strategies includes a limited sample of case studies (Vapa & Vapa-Tankos, 2019; Gabrielsson & Gabrielsson, 2011; Arenius, Sasi, & Gabrielsson, 2005). Yet, the research stresses the use of Internet-based sales channel strategies with the online space being a key facilitator for born global start-ups (Gabrielsson & Gabrielsson, 2011; Bell & Loane, 2010).

The acquisition of customers and quick market responsiveness positively correlate with the use of an online sales channel (Sinkovics, Sinkovics, & Bryan Jean, 2013). The findings from the comparative companies also highlight the importance of the online space when selling products in the international markets. Suunto admitted that the importance of brick and mortar stores in the Asian market are continuously decreasing. Likewise, SELKA only uses digital sales channels in their international markets. Yet the literature also conveyed the loss of essential market learnings and interactions with foreign customers if traditional sales channels are completely substituted with online sales strategies (Sinkovics, Sinkovics, & Bryan Jean, 2013). Similarly, Suunto has utilized partnerships with local distributors as a market entry method, later developing their own subsidiaries within the larger markets. SELKA also discussed the use of local distributors in countries with regulated and costly duty structures.

Furthermore, the secondary research on India concluded that the online medical retailer is becoming a popular place to purchase MedTech products and new governmental initiatives are increasing the duties of exports. As a result, LAKKA should consider an online hybrid sales channel strategy approach to minimize the liability of foreignness and avoid heavy duty costs (Gabrielsson & Gabrielsson, 2011). Particularly, using a local partner that has experience in the Indian medical industry, to directly target the medical practitioners. In terms of partnerships with local distributors, companies that lack market power require reliable long-term partnerships with a local distributor (Gabrielsson & Gabrielsson, 2011). Suunto's Head of Asia also recognized long-term partnerships as crucial in India, because they allow for growth and acceptance of short-term losses. She noted that the Indian market is less disciplined compared to other markets and thus it is important to be able to digest risk.

The literature determined that online sales channel strategies with proper support systems and a customized experience for users will foster high online presence (Reuber & Fischer, 2011). Furthermore, engaged online communities are positively linked to successful born global market entry pursuits (ibid). SELKA supported this claim, by actively tracking customer reviews through discounted prices and direct communication with the customer. Furthermore, they emphasized the importance of proactive online customer service. They acknowledged that through these customer reviews, people are more aware of others utilizing their product and hence wanting to purchase the product. They recognize this as one of the reasons they have been successful with their international market entry pursuits. Therefore, the MedTech start-up can incorporate patient reviews to their websites from their collaborations with the medical practitioners, to increase the awareness of diabetes and expand the visibility of their product.

The academic literature also recognized the impact of the digital transformation on communication between the medical community and MedTech companies, with the online patient forums. These online forums allow the companies to understand the desires of their customers and find new untapped demands (PwC, 2020). MedTech start-ups can incorporate patient reviews to their websites from their collaborations with the medical practitioners, to increase the awareness of diabetes and expand the visibility of their product. Furthermore, the Indian consulting company, discussed the important online players such as Practo, that facilitate in connecting doctors with patients. This can be used as an online space for start-

ups, like LAKKA to connect with the medical practitioners and understand what is currently missing in the market. Overall, the patient reviews on their own ecommerce, as well as joining other online patient forums, will aid in creating an engaged online community for both educational and market purposes. These initiatives will provide diabetics with reliable information and create demand for the MedTech's monitoring solutions.

However, usage of third-party online sales channels and own ecommerce sites resulted in contradictory empirical findings. Suunto, stated that a majority of their sales come from third-party retailers while SELKA strictly sells on their own website. Though SELKA also noted that there are several operational costs with running a website that must be accounted for. In terms of the Indian market, the external experts acknowledged that one's own website is an investment risk while there are a variety of third-party retailers that the start-up can be visible on. Academic research has also remarked that the positioning of a start-up's brand positively correlates to brand orientation and overall performance, meaning that brand does play a crucial role for consumer decisions (Muhonen, Hirvonen, & Laukkanen, 2017). Start-up brand development has also been recognized as being experimental and resource efficient (Centeno, Hart, & Dinnie, 2013). Suunto particularly admitted that their own website was utilized to position and establish their authentic brand and are visible on third-party retailers to sell their product. On the other hand, SELKA focuses everything on their own website, while incorporating the trial and error strategy to their entire business development. They further noted that flexibility is crucial with start-ups, to test whether certain strategies work.

Nonetheless, based on these findings and because the focus of a MedTech start-up's potential market entry is on the Indian market, these start-ups could consider collaborating with the online pharmacy retailers, after directly targeting the medical practitioners, to efficiently utilize their resources. Similar to Abbott's and 1mg strategic partnership, start-ups like LAKKA can gain the interest of 1mg and compete with its inexpensive price. For consumers, this partnership would increase the accessibility of the blood glucose monitoring in poorer communities. This would also allow 1mg to showcase a holistic range of products on their ecommerce site and tap previously unreachable markets. On the other hand, the MedTech start-up can form strategic partnerships with direct competitors of 1mg, in order to achieve a value proposition, they can use to compete with the leading MedTech ecommerce site in India. Hence, with the initial market entry, a MedTech start-up should not set up their own

online ecommerce because Indians are more familiar and gravitate towards larger pharmacy providers and it would require extensive resources to upkeep their own website, going beyond the boundaries of their current resources.

Research on born global start-ups have highlighted the use of low-cost push marketing techniques to create demand pull for their product (Gabrielsson, 2005; Centeno, Hart & Dinnie, 2013). Marketing techniques were an important theme concluded from the empirical findings. Particularly, niche target marketing was one of the important these that was not highlighted in the academic literature as a technique. SELKA noted the use of several online digital marketing techniques. They particularly gained attraction through Facebook advertisements and Google search engine optimization. SELKA acknowledged that as a start-up with a new category of product, similar to that of LAKKA, they had to create the vocabulary to search for their product hence the overall need for their product. They did this through focused niche target marketing and exclusively targeting urbanized cities. Moreover, they only applied the advertisements to these regions because they saw that their target customer market resided in these areas. Suunto approached their Asian market entries in a similar fashion by focusing on niche communities. In their first arrival to Asia they found demand for their watches in the scuba diving communities and in India they collaborated with the Indian military to gain the initial sales.

Business to consumer born global start-ups must use several different efficient yet effective promotion channels such as online marketing, editorial publicity and piggy-back marketing to achieve the visibility and impactful word-of-mouth for their product and brand (Gabrielsson, 2005). SELKA highlighted the use of editorial articles and advertisements, particularly focusing on the word choice within these articles to help consumers search for their product on Google and gain the word-of-mouth potential from users. Suunto also reflected that they used the scuba diving and athlete communities in Asia to piggy-back off of and help spread the word of their product within the community. However, Suunto also noted that the key opinion leaders in India are the celebrity athletes, as consumers are highly fascinated with the celebrity status in India and are influenced by their behavior. Unfortunately, Suunto was unable to reach these KOLs because of limited funds.

Consequently, if a MedTech start-up wants to enter with their current resources, they must push for the word-of-mouth traction, precisely finding a niche target market. The niche target market could potentially be the medical communities in the Tier 1 cities of India. Accordingly, by reaching the doctors and their networks through online channels such as Practo, they can inherently push the product to the diabetic patients, spreading the visibility of the product further. This is because the diabetic consumers will not be willing to try the product without the confirmation from the Indian medical associations.

Inbound digital marketing was noted in the literature as a new advanced form of marketing that better allocates the marketing budget of a company, particularly restricted for a start-up (Patruti-Baltes, 2016; Weidert Group, 2016). The new types of marketing rely on the online space and focus on collecting data to understand and attract the potential target customer, through the use of social media and SEO tools. The ultimate end goal of this new way of marketing is to form and maintain sustainable customer relationships through data analytics (ibid). SELKA remarked extensive use of Facebook advertising and Google's SEO tools, specifically mentioning the singular use of digital marketing in their international markets. They noted a particular digital campaign to gain foot traffic on their site, from these campaigns. From these campaigns, they were able to understand who was interested in the product and purchasing their product, hence who to directly target. SELKA emphasized the use of several different methods of content creation and advertisement testing on the Facebook and Instagram platforms to gain customers and sales, working from past failures and successes. Furthermore, they noted the need to spend on digital marketing, as no results will occur with minimal effort.

MedTech start-ups can employ similar digital marketing tools, particularly if they go the wellness route in certain markets. These digital marketing approaches increase the reachability of their communicative message more effectively than through traditional marketing. Initially, they should target consumers who are already interested in their metabolic health, sports enthusiasts, and athletes who use different wearable devices to track their performance. Limiting advertisements to smaller niche groups, such as the ones listed above, allow for efficient use of their limited resources. And although there may be consumers outside this group interested in their product, the majority of profit will be within

these margins. These consumers can further advocate this product to the extended population, thus maximizing the word-of-mouth effect.

As this thesis was specifically focused on the Indian market, the marketing tools must be tailored to the target market. Therefore, the targeted consumer in India differs from that of other markets, particularly if they were to go via the wellness route. The academic literature on born global start-ups cited the need for the start-up to play an active role in the consumer demand generation, as no single channel member is interested in providing visibility and brand awareness creation for an unfamiliar foreign company (Gabrielsson, 2005). The MedTech start-ups need to heavily rely on their local partner to have relationships with the medical community in India and have them advocate the product on the consumer market. Additionally, these start-ups need to be proactive in engaging with consumers and providing education on diabetes in the Indian market. As a result, they can utilize the digital marketing tools such as Facebook advertising to reach and target the desired consumer, which in India would be the online diabetic community. The content they create both on their own website and advertisements could focus on educational tips, specifically how to live a healthy life with diabetes as well as the promotion of their solution in caring for the disease.

5.5. Potential Implications for International Entrepreneurship

Lastly, it is important to reflect on the potential implications of this strategy as practice case study analysis for the theory of international entrepreneurship. The MedTech industry and Indian market provided an interesting concept of a highly regulated industry and complex business environment. Particularly, the study of born global start-up internationalization is limited and thus the potential market entry strategies are based off of conducted case study analysis.

The academic literature on marketing techniques acknowledged the differing approaches that born globals take compared to traditional MNEs internationalizing, with specific emphasis on cost efficient techniques (Gabrielsson, 2005; Centeno, Hart & Dinnie, 2013). This thesis research concluded that niche target marketing can be applied. Specifically, focusing on either target cities or communities to attack with marketing. This was found to

be a successful tool utilized by two Finnish SMEs internationalizing and can potentially be an approach taken by LAKKA with their product. Furthermore, the findings also noted the importance of Google search engine optimization when dealing with a new type of product, and thus education and awareness of this new type product is done through creating vocabulary that consumers can use to search for the product online.

The findings of online sales channel approaches in terms of whether to be visible on third-party ecommerce sites or create a brand ecommerce website found differing results. However, the results highlighted the geographic and target market subjectivity. The greater visibility creation of each option depends on the consumer behavior within the target market and the usage of available ecommerce channels. In terms of market entry reflection, a born global can have quick internationalization but it is still subjective to the business environment of the country, hence some markets are not equipped for quick internationalization.

The thesis research also developed the notion of the trial and error strategy to not only be a useful tool in brand development but in general business development. The findings noted that born globals must emphasize market experimentation rather than waste resources on extensive target market analyses, as online consumer behavior, particularly the usage of social media is more homogenous and does not require extensive market research. Therefore, highlighting the major implication of digitalization on born global internationalization. The global digital transformation allows start-ups to use more homogenous social media marketing strategies in a variety of their different target markets.

6. CONCLUSIONS

The final chapter of this thesis contains the summary of the main findings of the research, illustrating the final conceptual framework with the combined results from the academic literature and empirical research. The chapter will continue with the significant managerial implications for the case start-up, LAKKA Health Oy. Finally, this chapter will provide suggestions for future research.

6.1. Summary of Main Findings

The main objective of this intensive, single case study research was to study and contribute to the theory of international entrepreneurship. The focus of the thesis was to determine a potential market entry strategy for a medical technology start-up. This was done using the case study example, LAKKA. The start-up is currently developing a hypoglycemia detection wearable device with motivations to internationalize to several markets in quick progression. LAKKA received interest of a potential partner in India and due to the attractive number of diabetics, and underserved communities, they were interested in entering the Indian market in their first round of internationalization. Due to the unfamiliarity with the Indian market, this research explicitly focused on understanding the complex business environment. Therefore, the explicit focus of the research was to find a potential market entry strategy for a MedTech start-up and their wearable device to this market. The main emphasis was understanding the sales and marketing channel strategy options that can create optimal visibility and sales for the product. The research question and sub-questions were answered through empirical research on online secondary data and interviews. The interviews were conducted with both the internal management of LAKKA, external experts on the Indian business environment and Healthtech industry, and lastly successful internationalizing SMEs.

The conceptual framework introduced in the literature review based on academic literature was further reconfirmed by the empirical findings, along with novel insights not mentioned in the literature. The Figure 6 below details the new framework altered with the results from the observations of the empirical research. It can be concluded that the findings confirmed

the plausibility of a market entry for a MedTech start-up with their hypoglycemia detection device to the Indian market. However, the analysis also revealed several obstacles and challenges that must first be acknowledged and considered prior to a market entry.

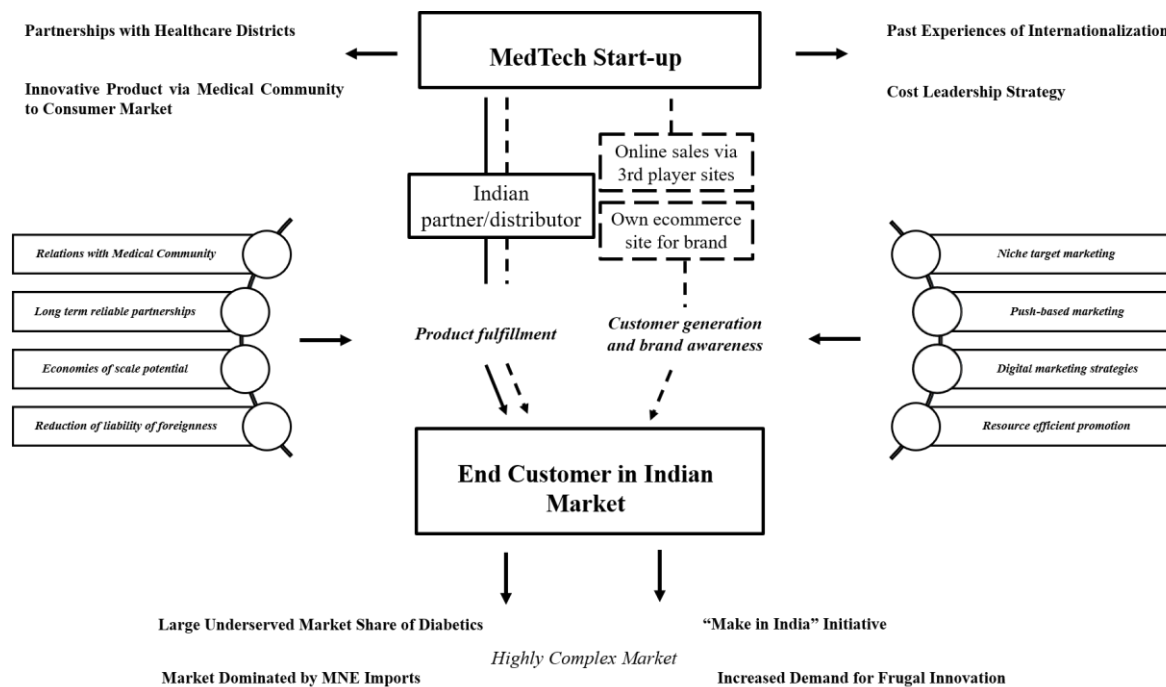


Figure 7: MedTech Start-up Market Entry Strategy to India Framework

Internally, a medical technology start-up has limited experience of bringing companies to international markets, which was highlighted as a key determinant of market entry succession in the literature and from the empirical research (Lee, Park, & Lee, 2019; Gabrielsson, 2011). Therefore, as seen in the figure above, internationalization experience is still a significant attribution for the start-up to have prior to market entry. The recruitment of this knowledge gap or collaboration with local partners familiar with market entries will ensure this capability is secured by the start-up. Additionally, the empirical results determined the inability to access the consumer market in India because of the high marketing costs, inconsistent awareness, knowledge of diabetes, and reluctance to try high involvement products such as wearable devices. As a result, a MedTech start-up is unable to enter the market via the wellness product approach and instead must gain the medical device certification in order to achieve the trust and advocacy of the medical community in India.

This is because the costs of creating the demand for a wellness product is greater than the time and resources saved from entering via the self-declaration route.

Furthermore, the empirical research reconfirmed the literature in regard to using external networks. Particularly, MedTech start-ups should collaborate with their healthcare districts in the clinical test stage to gain assistance and develop the product to meet the current demands. The use of the cost leadership strategy was also restated as a possible strategy choice in the Indian market. This is due to the cost sensitivity within the market as medical fees are being mostly footed by the individuals. The current competitors in the market, such as Abbott, have tailored their products to the more affluent population. Therefore, the MedTech start-ups should emphasis on lower cost monitoring solutions to attract customers and differentiate from the competitors.

The Indian market was concluded to have high demand potential, however low awareness levels specifically in terms of diabetes awareness and monitoring solutions. Currently, the CGM market is dominated by large MedTech MNEs who are also partnering with the main ecommerce websites to increase their online accessibility and increase market share. Additionally, the new governmental structures mean that manufacturing is economically more reasonable to maintain in India as the exported final goods are heavily taxed. Therefore, due to the unfamiliarity of the market, lack of external networks to Indian medical communities, and the opportunity to exploit the low production costs, the MedTech start-up interested in entering needs to find a local partner. Precisely, a long-term partnership, as this is desired by successful local distributors in India who realize the risk and potential losses in the initial years. The local partner also needs to have key connections to the medical associations and have familiarity with the MedTech industry, in order to quickly reach the desired consumer. This is because the medical practitioners in India are key opinion leaders and trusted by the consumers in regard to medical device usage. Hence, they will promote and advocate the product to the patients. However, the start-up must also be proactive in their own approach to ensure the product is easily accessible online on different third-player retailers, as the start-up still has the responsibility of selling the product.

It can be determined from the empirical and secondary analysis of the target country, thus India, that the market is highly complex on the scale of market complexity. Market complexity is a result of several factors including behavior of consumers, competitive nature,

price sensitivity, and overall distribution and retailing management (Rajagopal, 2012). In India, the consumers are highly price sensitive and reluctant to use high involvement products, like wearables, because of the limited awareness and education in regard to diabetes and how to care for the chronic disease. The market is also highly competitive with MNEs currently dominating the CGM diabetes monitoring industry and several large and small players fighting for market share in the SGBM industry. However, there is demand for frugal innovation, thus a potential for new start-ups to introduce their new approaches to blood glucose monitoring. The distribution and retailing management have great promise in India with several companies interested in partnering with international players. Yet, the large market and the limited resources of the start-up means that only specific Tier 1 cities are economically plausible to target. Furthermore, the Internet as the main sales channel is also highly possible with 100 million consumers shopping online monthly. However, gaining visibility on the large ecommerce sites requires a local partner with strong networks to these players and the overall medical industry. Therefore, it can be concluded that the potential obstacles outweigh the opportunities in India, making it a highly complex market to enter. Furthermore, as India is considered to be an emerging economy, it has similar traits to other emerging economies, therefore these strategies and market entries can be potentially generalized to other markets with similar levels of complexity.

It is also essential to understand the sales and marketing channel strategies that will aid a MedTech start-up in gaining optimal visibility and sales of their product in the Indian market. MedTech start-ups should utilize the online hybrid sales channel approach alongside local distributors, as illustrated in the figure. Particularly, the Indian online ecommerce environment has several influential players and should focus their attention on gaining visibility on these sites, after the direct targeting of the medical practitioners. As limited resources are a characteristic of start-ups, establishing an individual ecommerce website would be an unnecessary investment risk that involves too many operational costs. Therefore, as illustrated in the framework the MedTech start-up should sell directly to consumers via the larger third-party ecommerce players and utilize their own ecommerce site for brand creation and expression. Additionally, in emerging economies such as India, medical technology start-ups should focus on niche target marketing towards the medical communities, specifically in the Tier 1 cities. The medical communities can aid in spreading

the word-of-mouth of their devices and reach online communities of the particular chronic disease.

In terms of their own website, along with creating the story behind their brand and communicating the overall message to consumers, MedTech start-ups could highlight patient reviews to showcase the ease of use of the product and provide educational tips on how to care for diabetes. Additionally, start-ups can utilize online social media marketing and engage in online Facebook communities, particularly placing advertisements on these webpages, as this is their direct target group. They could also try and reach a KOL, in India it would be the celebrity figure. The power of the celebrity in India would increase the word-of-mouth effect of the online space and potentially tap unreachable markets, thus disrupting the market. The overall emphasis should be on trial and error with these different digital marketing methods to determine what works and does not work for them and the Indian market. However, it is important to emphasize that the usage of a trial and error strategy is efficient to an extent. As a start-up has limited resources, they have an error threshold and certain errors, and mistakes can in fact be detrimental. As a result, although the start-up does not necessarily need extensive market research analysis from an external source, it is important to take small steps within the target market through the use of cost-efficient techniques. Moreover, it would not be beneficial for the start-up to blindly enter a market without any knowledge about the basic business environment and consumer behavior.

Lastly, it is beneficial to conclude the main findings by reflecting on the main research questions and objectives of this thesis. Therefore, the main research question and sub-questions are detailed below as well as their respective summarized answers.

What is a potential market entry strategy to the Indian market for a medical technology start-up with the launch of their hypoglycemia detection wearable device, in terms of sales and marketing channels strategies, to gain optimal visibility and sales potential?

The findings highlight that the most optimal sales and marketing channel strategies for a medical technology start-up to an emerging economy, such as India, would be through the use of a hybrid sales channel (Gabrielsson & Gabrielsson, 2011). Additionally, the emphasis

should be on finding a long-term local Indian partner and utilizing Internet-based sales channels. A MedTech start-up would need support from their local partner and their networks to gain accessibility to the large ecommerce players in the medical industry. These relationships and being accessible on the sizable ecommerce sites will increase their online visibility as selling via their own ecommerce website would involve significant operational costs and thus be riskier. Regarding, marketing channel strategies, the MedTech start-up should focus on efficient digital push-based marketing with emphasis on social media and SEO optimization marketing on Tier 1 cities in India. Moreover, the start-ups need to directly target the medical community with their monitoring devices for them to create the word-of-mouth effect and create the demand for the product.

1. *How does a medical technology start-up go-to-market strategy choice between a certified medical device versus a wellness product impact their ability to gain visibility and potentially disrupt the Indian market?*

The MedTech start-up should enter an emerging economy, like India, using the certified medical device strategy. This is because it would give them greater access to the medical community to promote their product, thus enabling them to gain greater visibility and sales potential. Furthermore, the lack of awareness and education in regard to health and wellbeing would require extensive marketing to get the buzz for a wellness product in India. The academic literature noted that previous purchasing behavior needs to be acknowledged before entry (Lee, Park, & Lee, 2019). The empirical research concluded that there is high reluctance of high involvement products that are in direct contact with the skin, which highlights that the consumers are not interested in these types of products. Therefore, the MedTech start-ups must prove the need for their products, which is plausible through the medical device certification. Furthermore, the theme of accountability in the Healthtech industry was found as highly significant. Hence, the trust and credibility for a product can be directly formed from the medical device certification.

However, it is essential to note that the medical device route involves extensive clinical tests that are both costly and time-consuming. Start-ups managers have even acknowledged that the close relations larger companies have with health sector organizations give them access to free trial runs, which creates a large barrier to enter for start-ups with limited relationships

(Saarela et al., 2018). Therefore, although it was concluded as the better option to gain visibility and sales potential in the target market, it may not be the most economically feasible or efficient option for the start-up. Hence, the start-up must acknowledge the heavy cost and time consumption and conclude whether it is financially a plausible option for them.

2. How can a medical technology start-up utilize the cost leadership strategy and maximize brand awareness and market share within the boundaries of the single product internationalization strategy and limited resources?

The academic literature and empirical research concluded that a cost leadership strategy is plausible in the price sensitive market of India. Specifically, a MedTech start-up can differentiate themselves from the bigger MNEs with a lower cost. However, because start-ups are also identified by their limited financial resources, niche target marketing should be utilized (Kraus et al., 2017; Zhang & Li, 2010). The empirical research explicitly concluded that start-ups do not have the capabilities to overinvest into a market nor would it be efficient to target an entire market. Therefore, a niche target market strategy alongside the support from medical institutions should be the focus of the MedTech start-up, to maximize brand awareness and market share. However, due to the boundaries of single-product launches and limited resources it should also be noted that complex emerging economies, such as the Indian market, may not be the most promising first target market for small-scale medical technology start-ups due to these resource and product restrictions.

3. What are the potential implications of this cost leadership strategy as practice for the international entrepreneurship (IE) theory particularly with the context of a highly regulated industry and business environment?

In terms of the last sub-question, it must be first acknowledged that due to the single case company nature of this thesis, the generalizability to the IE theory is limited. Nonetheless, the complex business environment and highly regulated industry context of this thesis highlight the importance of trial and error strategy in start-up business development to an extent. Extensive market research analysis prior to entry is not required, rather the focus should be on small scale cost-efficient testing in the target market. The academic literature mentioned the experimental strategy use for start-up brand development (Centeno, Hart, &

Dinnie, 2013). However, the empirical research further revealed that start-ups should be experimental in their overall business development because it ensures cost and resource efficiency. The main implication of the digital transformation on born global internationalization is the homogeneity of online consumer behavior. The uniformity in behavior allows for born globals to exploit market experimentation through the use of standardized social media strategies. This also allows born globals to utilize their scarce resources more efficiently on these new digital marketing tools rather than on extensive market research investigations to understand the consumer in their target market. Lastly, this thesis resulted in several implications that LAKKA should consider with India as a potential market and beyond.

6.2. Implications for Management

LAKKA Health Oy is currently in the feasibility stage with their hypoglycemia detection wearable device and thus the main strategic outlook and overall functionalities of their product are still to be determined. Furthermore, this research focused on a premature strategy for a market entry to the Indian market and certain issues may not be applicable or altered once the start-up is ready to go-to-market. Nonetheless, this research revealed certain internal and external considerations that LAKKA should contemplate in the future with their internationalization strategies.

The limited internationalization experience and go-to-market experiences within their team, can be a potential crutch for them in the future with their expansion desires, which is clearly acknowledged and internally understood by the start-up. Therefore, in the future they will pursue the allocation of resources to fill this knowledge gap internally through recruitment or collaboration with experienced partners. This would minimize their risk aversion and willingness to utilize trial and error strategies when looking for target markets, instead of using their limited resources on external market analysis reports. This is because digitalization has led to homogeneity in online consumer behavior which gives LAKKA the ability to utilize similar social media targeting strategies in several different markets.

In terms of potential target markets in their initial internationalization period, India requires extensive amount of patience and resources, and although the demand for new affordable diabetes monitoring solutions is desperately needed, the lack of education and awareness decreases its initial attractiveness. Therefore, the supportive capabilities of the local partner are crucial, and thus LAKKA should look for a distributor already familiar with the MedTech industry who has the reach to gain access to the medical communities. However, this also requires a certified medical stamp of approval because the demand within India is not enough to be able to sell a want product through a wellness status. The cultural development is still underway and thus in the future, the consumers may be more interested in taking accountability of their health, however now they view wearable bandages, like the one of LAKKA, as a high involvement product and thus still show high reluctance to utilize such a product.

Although the market entry to India is plausible based on the empirical findings, it appears to be significantly ambitious and risky as an initial internationalization strategy. India is an overly complex market and would be a great learning experience for any company, however willingness to lose money in the first few years is crucial. And due to the limited resources and international market knowledge that start-ups like LAKKA possess, going to this market immediately could potentially be detrimental for the start-up. On the outside, India seems highly attractive with a growing number of diabetics and underserved areas. However, a closer look shows there to be several obstacles and challenges that can be extremely difficult for LAKKA to take on with their current resources. As LAKKA would have to heavily rely on their local partner and the medical community to create demand for their product, which would take years and extensive resources. Hence, LAKKA would be more prepared for a complex market like India if they first focused on gaining more market experience by initially entering their domestic and Nordic markets. As this would help them gain the first sales, initial word-of-mouth, and create the demand for their non-invasive method of monitoring blood glucose. Once the start-up is more established with more resources, India would be a valuable market entry experience for them. With more resources, LAKKA would be better able to digest the riskiness of India and achieve optimal visibility and overall sales potential in the country.

Beyond the potential of India, the findings also highlight the need for LAKKA to create the understanding and demand behind their new type of blood glucose monitoring, and potentially tap into the growing trend of measuring metabolic health through blood glucose levels. Even though, LAKKA is still in the development stage for their product, it would be beneficial to be proactive in getting their brand and solutions visible to the consumers. This is because the need for their product needs to be directly communicated to the consumer. In their press releases they should emphasize certain words that consumers can later utilize to search for their product. Therefore, every article written by them or others must be strategic in a way that establishes them as a brand and creates the demand for their product. Furthermore, LAKKA can utilize the method of piggybacking off their competitors to spread the word about measuring blood glucose for wellness and sports performance reasons and non-invasive ways to measure blood glucose levels. The market and demand for the wellness side of blood glucose monitoring is currently being created with room for start-ups like LAKKA to take an extensive share of the market.

Lastly, due to funding being a bottleneck problem for LAKKA, they could consider selling or licensing their technology to bigger MNEs within the wellness realm who already have the market share and consumer loyalty. This is because blood glucose measurement is becoming a new trend that can influence one's wellbeing and thus the major MNEs in the wearables industry are interested in adding this capability into their own devices. As a result, LAKKA can invest in their future products and market entries with the profits from these transactions.

6.3. Suggestions for Future Research

This thesis research on LAKKA Health Oy and their market entry strategy potential to the Indian market reveals the need for further research. Firstly, because this research specifically focused on a singular case study, the generalizability of the findings is fairly restricted. This research studied a potential market entry strategy to one particular market; however, the start-up is still in the development stage. As a result, it would be interesting to conduct a longitudinal analysis on LAKKA, to determine how the results of the feasibility stage will affect their go-to-market and internationalization strategies. Furthermore, it would be

noteworthy to analyze the potential of other target markets and compare the differences in sales and marketing channel choices used in the different markets. In terms of the methods used in research, other data collection methods can also be used. For example, interviews with different stakeholders and comparative companies could provide differing expert opinions and other potential sales and marketing channel strategy ideas. Additionally, as the start-up develops and enters the market, quantitative methods such as surveys and questionnaires could be utilized to better understand the consumer perspective and their interest in the product in potential target markets.

Furthermore, born global start-ups' growth and internationalization strategies are a fairly novel research area. Therefore, more studies with similar MedTech start-ups could be conducted to fully determine whether the conceptual framework can be generalized to a greater population or whether it should be start-up specific. Additionally, research on different start-ups in a variety of industries such as the financial technology industry, would provide the ability to compare whether the importance of internationalization experience within the start-up and the homogeneity of digital consumer behavior can be generalized to this industry. Furthermore, it would also be beneficial to study start-ups in different stages of development as they could provide insights into how the current situation of the start-up affects their potential to internationalize and what strategies are the most useful. Overall, these additional research topics would increase the objectivity of the findings and increase the implications for the international entrepreneurship area of research.

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APPENDICES

Appendix 1: Interview Guide for LAKKA Health Oy Internal Employees

Introduction

1. What is your background and why did you choose to join (create) LAKKA Health Oy?
2. What is your current role in LAKKA Health Oy?

Understanding start-up brand and customer viewed brand

3. What is the company's mission statement, vision, values?
4. How do you want the consumer to view your product, the company in general?
5. What marketing has been done so far, who knows about the company so far?

Understanding the product and value proposition

6. Briefly describe the product that is being currently developed as well as the desired time frame for it to reach the market.
7. Briefly describe the business model (show diagram of Business Model Canvas)
8. What do you see as the main value proposition for the hypoglycemia product and LAKKA Health Oy in general?
 - a. What is the market gap LAKKA Health is filling with their product?
9. Who are your competitors?
10. What advantages/ core competencies does your product have compared to others?
 1. Show SWOT analysis
 2. Positioning in the market

Understanding the customer target

11. Who do you see as your main customer target segment?
 - a. Are you focusing on a niche market or a broader customer group?
12. Is the target market the same in each market you will enter?
13. What is the pricing strategy for the product and how is it tailored to the desired customer target?

Understanding the organizational capabilities (market entry experience, internationalization, risk willingness mindset, access to external networks)

14. Do you have previous experience on market entry/ internationalization? If so from where and what?
15. What internal factors within the organization do you see will benefit the internationalization?
16. What internal and external factors within the organization do you see as challenges or possible obstacles for the company and its internationalization strategy?
17. Do you have access to any external networks, or know of any partners within Europe, interested in working with your company and the product?

Regulations on Medical Products in EU

18. Briefly describe based on your previous research, the regulations within this medical device category within EU
19. Based on your research on regulations within EU, what are the factors that should be considered when choosing the best fitting country as the third option for LAKKA Health Oy with the hypoglycemia wearable device?
20. Do you think anything is missing from the current support system of the Finnish healthcare institutions/organizations, government in terms of support for your start-up in particular, if so what?

Understanding the reasons for internationalization

21. What are the motivations to for quick internationalization to Sweden and a third EU country, after initial entrance into the market?

Appendix 2: Interview Guide for T&A Consulting

General Opinions on the Indian Market

1. How should India be market segmented?
2. “Make in India” initiative, is it a requirement from the government to have manufacturing in place in India
3. What are the entry strategies towards the Indian market?
4. Why the Indian market and where to find opportunities in it?

5. What sales channels do Indians utilize when purchasing products, particularly exports in the Healthtech (do they vary in the urbanized areas and smaller villages) (what are the online channels utilized)
6. What is the population of middle class
7. How does Healthtech product marketing usually work in India?

Internationalization Strategies for Start-ups

8. What in your opinion on “Born Globals” in other words start-ups that have quick internationalization strategies with limited experience in their domestic market?
9. What are the main benefits of quick market entry/internationalization to India?
10. What are the main obstacles/barriers for market entry/internationalization to India?
 - a. what is the risk of foreignness, how to combat that?

Best Practices for Start-ups Internationalizing

11. What do you see as the most important internal factor/capability within an organization to successfully internationalize / enter the Indian market?
 - a. innovative product, international market expertise, other organizational abilities, external social capital/network access
12. Based on your own case experiences working with start-ups, what do you see as the main reason for failed market entries/growth strategies to India?
 - a. What mistakes do these start-ups do with their market entry to India
13. What are the main reasons for successful market entries/growth strategies?
14. What do you view as the best strategy for start-ups in Finland (ensure best growth and sales potential)?
15. What in your opinion do you see as the best fitting market entry strategy, in terms of sales channels to maximize sales potential for a start-up such as Lakka Health Oy, based on previous experience with other start-ups?
16. Based on previous experiences with start-ups, do you see brand awareness and brand creation possible for a start-up internationalizing?
17. How do start-ups gain visibility in the Indian market?
18. How do Indians view unknown brands vs name-brands?

Appendix 3: Interview Guide for Terveysteknologia ry (Healthtech Finland)

Introduction

1. What is the aim of Healthtech Finland, and its purpose particularly for start-ups in the Healthtech industry in Finland?
2. Current market outlook of the Healthtech industry in Finland and Europe?

General Opinions on Internationalization Strategies for Healthtech Start-ups

3. What in your opinion on “Born Globals” in other words start-ups that have quick internationalization strategies with limited experience in their domestic market?
4. What are the main benefits of market entry/internationalization specifically within the Healthtech industry?
5. What are the main obstacles/barriers for market entry/internationalization specifically within the Healthtech industry?

Best Practices for Healthtech Start-ups Internationalizing

6. What do you see as the most important internal factor/capability within an organization to successfully internationalize / enter a market?
7. Based on your own case experiences working with start-ups, what do you see as the main reason for failed market entries/growth strategies?
 - a. What mistakes do these start-ups do when they internationalize?
8. What are the main reasons for successful market entries/growth strategies?
9. What do you view as the best strategy for Healthtech start-ups in Finland (ensure best growth and sales potential)?
10. Based on previous experiences with start-ups, do you see brand awareness and brand creation possible for a start-up internationalizing?
 - a. What do you see as the best way to establish brand awareness?

Future Outlook

11. What do you see for the future of Healthtech Industry and particularly the remote medicine industry?
12. What do you see will be the most important considerations a start-up must make before internationalizing?

13. How do you see your role within the Healthtech industry will change in the future?

Appendix 4: Interview Guide for SELKA Oy

1. How did you begin your internationalization? Did you enter several markets at the same time, or remain in Finland first?
2. Do you utilize any traditional marketing tools?
3. How did you gain visibility through the internet? What social media platforms did utilize?
4. What are the cost efficient marketing tools that can be utilized to create demand for your product?
5. Did you target your international customers in a different way?
6. How did you establish your brand, has it changed?
7. Have your target customers changed?
8. How did you convert social-media followers into customers?
9. How did you measure your social media marketing efforts?
10. What are your best practices with social media marketing? What marketing efforts did not work?
11. What types of content should one post on which social platforms?

Appendix 5: Interview Guide for Suunto Oy

1. Briefly describe your role at Suunto?
2. Who is your main customer target segment? Do you they differ in different markets?
3. What is the brand of Suunto?
4. How have you established the brand for Suunto, do you adapt it to each market, or do you have one established brand?
5. How do you make your decisions when expanding the product to a new country?
6. How did enter into the Asian markets, with partnerships or green field investments?
7. What types of marketing do you utilize, in Finland and specifically in the Asian markets?
8. How do you remain competitive, in the wellness product with so many substitute brands?

9. What should be taken into consideration when expanding into a new country?
10. How much market share comes from exports vs sells in Finland?
11. Do you have in store presence in the Asian markets or focusing on ecommerce?
12. Based on your own experiences, what are reasons for failed market entries?
13. When did Suunto gain profitability in the Asian markets?
14. What is the most challenging aspect of the Asian markets?
15. How did you gain visibility in the ecommerce markets, what online marketing techniques do you utilize?

Appendix 6: Example Section of Data Analysis of the Interviews

Themes from Interviews	Interviewees			
	Heidi Peltolahto	Sami Lakka	Sharmin Photographer	Tarun Gupta & Gaurav Singh
Potential of India	"The user population size, the price sensitivity of the market, does the product find the correct target market segment in the country, how is diabetes as a disease in the country, how difficult is it to enter the country in terms of regulation, what kind of presence do we need in that country, do we need our own subsidiary or can we export our product to that country."	"We have not discussed much about the potential of our 'HypoSense' product, only that they could be there as a potential sales channel. This however is still open. We are still looking at that situation... The Indian distributor is one possibility. If we sell through the online store, we can get it running in India and have a local office there if needed. But how we gain the visibility, and whether the local Indian distributor can gain that visibility for us is still in the air."	"Most Indian distribution companies, or well-established trade companies who are willing to take on new brands, they look for long term partnerships. They don't like short term partnerships, to allow for gestation to digest short term losses."	"The online channels are a good starting point to connect to the right audience. Now 100-150 million people are those who transact at least once a month on an online channel."
Business Environment of India		"Currently, the local Indian distributor has four billion sales annually and it is a manufacturing company, it can be compared to GM. To my understanding it is more of an OEM, where they do not have their own automotive brands but rather manufacture the product. They are expanding to medical devices, however currently they do not have any product portfolio. And do not have any visibility in the medical device industry."	"And then also the government duty tax structure, the red tape authorities, and going through that aspect is challenging - so all importations are subject to high taxes, duties."	"The local partner would absolutely need experience in the Health Tech/ Med tech industry and have products in which the sales force is already meeting medical practitioners"
Medical Industry of India				"Over 60 percent of the healthcare spent is out of pocket and the private healthcare insurance penetration rate is about 20 to 25 percent."
Approaches to ME in India				"While working a lot will depend on negotiation discussions, what is the right kind of partner, what support is needed, disruptive marketing, do they have the reach to the doctors so that their product can be given to the doctors to test. It must be a multiprong approach."